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Economic Outlook. *A second recession in as many years seems under way. How deep, how long? It depends mainly on the spending mood of consumers, a further drop in interest rates.* *1*

Squeeze on the States. *Big budget problems lie ahead for states, localities. Red ink will force spending cuts, tax hikes. Implications for the economy and for financial markets.* 5

Managing Money Flows. *Some $600 billion moves through the U.S. banking system every day. Coping with those massive payments is the task of a bank's "money-position" managers. A primer on such operations—and how they affect Fed monetary policy.* *11*

Economy Watch

RECENT economic numbers have been almost universally bleak. The weakness visible all year in housing and autos clearly has spread to much of the rest of the economy. Industrial output has dropped sharply in the past two months. Moreover, in October only 33% of all nonfarm industries reported increases in employment levels—down from 57% in September, and virtually identical to the reading in the depths of last year's recession. Over all, the October unemployment rate, at 8%, was the highest in six years.

The pronounced sag in activity has once again caught the forecasting community by surprise. Whereas a scant six weeks ago most analysts—including those at The Morgan Bank—expected that the economy would avoid a downturn, most now characterize the economy as being in a recession, the second in as many years.

Reflecting the marked change in conditions that has recently developed, the current Morgan Bank forecast shows a decline in "real" (price adjusted) GNP in the fourth quarter at a 3% annual rate (table on page 2). Just a month ago the expected drop was less than a 1% rate.

With hindsight, it is not difficult to explain the current decline in activity. Interest rates have been at punishing levels throughout the year—with the marvel being, really, that they didn't bite any earlier. Indeed, it was probably because the broad economy was able to hold up so remarkably well for so long—despite the interest-rate burden—that many analysts underestimated the developing downside risks. But the drop in demand was gradual so that it obscured the imbalances that were building up between sales and inventories.

Over the past month, data on business inventory positions—which are released with a considerable lag—have pointed increasingly to the emergence of excesses in the durable-goods sector (chart on page 3). With the recent availability of August data on constant (1972) dollar stocks and sales, mounting overhangs—which first began to show up in the July inventory/sales ratios—were confirmed in the durable manufacturing sector and in the nonauto durable trade sector. Inventory behavior in these areas traditionally has been the most volatile component of inventory adjustments. The August data also indicated that the current inventory cycle is unfolding in a fashion similar to those of the past—with the buildup in inventories mostly due to weakness in sales (table on page 3). Moreover, while constant-dollar data are not available for September, book-value figures suggest that inventory positions in that month worsened significantly in durable manufacturing.

Reflecting those trends, the economy now appears to be in the midst of a relatively moderate inventory adjustment. The drag from this inventory cycle comes on top of an already weak outlook for final demand. Employment and production curtailments in October were concentrated in the very areas where inventory excesses are apparently most burdensome. The quick response of manufacturers in adjusting production schedules downward should result in a significantly slower rate of inventory accumulation in the current quarter—probably at an annual rate of something like $2 billion (expressed in 1972 dollars)—compared with about $10 billion in the third quarter. It would then be reasonable to expect a further move to at least a modest amount of actual liquidation of inventories early next year if production schedules, as seems likely, are kept under tight rein.

The assumption that the inventory adjustment cycle will be of moderate character must of necessity be tentative as of now. Ultimately, of course, the crucial determinant will be how well or poorly consumer spending holds up in the Christmas selling season—a period in which merchants account for more than 25% of their annual sales volume. Nonauto retail activity in October continued the lackluster performance of recent months. Moreover, consumer-sentiment readings have deteriorated and that deterioration could easily be accentuated by the bulge in unemployment and the growing consciousness that recession has developed.

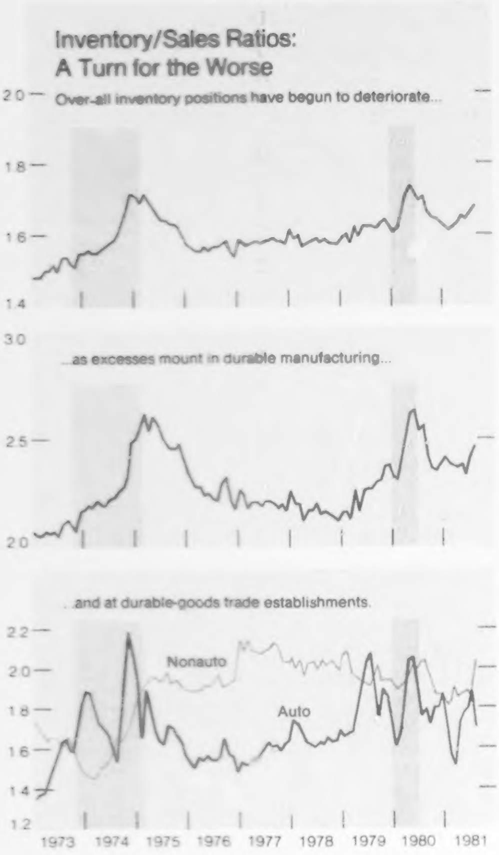
Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1981			*1982*	
	Q2	*Q3*	*Q4*	*Q1*	*Q2*
Real GNP	−1.6	−0.6	−3.0	1.0	3.4
Real consumer spending	−2.1	4.3	0.1	2.6	2.1
Real business-capital outlays	−2.2	−0.2	−2.9	0.2	2.6
GNP deflator	6.4	9.4	7.9	7.0	6.4
Consumer prices	7.5	11.9	9.8	7.1	6.5
Real disposable personal income	1.4	2.3	2.2	1.2	2.0
Saving rate (%)	5.4	4.9	5.4	5.1	5.1
Housing starts (Millions)	1.18	.97	.90	1.05	1.21
Auto sales (Millions)	7.8	9.1	8.1	8.2	8.2
Unemployment rate (%)	7.4	7.2	8.0	8.1	8.2

NOTE: 1981 Q2 and Q3 data are actual. Approximately one percentage point of the rise in the GNP deflator in the fourth quarter reflects the timing of federal pay increases.

A second crucial factor in the outlook obviously is the trend in interest rates in coming months. Already, rates have dropped sharply



NOTE: Based on constant 1972 dollars

all across the maturity spectrum and further declines almost certainly lie ahead. That prospect is likely, given the soft tone of the economy and the likelihood that the Federal Reserve will continue to aim at increasing the rate of growth of the monetary aggregates (particularly M1B, which has shown virtually no growth over the past six months). What is particularly crucial to the business outlook is that long-term rates continue to decline; unless this happens, it is very difficult to see rejuvenation in housing activity or an upturn in capital investment.

Until quite recently, the common expectation was that a major decline in long-term rates was precluded by the huge borrowings in prospect by the federal government to finance an estimated $80-billion deficit, by a large backlog of unmet needs for financing on the part of businesses and state and local governments (story on page 5), and by hesitance on the part of traditional long-term investors to commit their funds to the mortgage and bond markets—owing to their concern over inflation. Now, with the economy considerably softer than anyone had expected a month or two ago, it suddenly seems possible that the recent rally in bond markets could carry considerably further than was expected—especially if the recession contributes materially to reduced inflation. Whether the rally in fact persists—along with how well consumer buying fares in the Christmas season—is likely to be the key in determining how severe and long-lasting the recession turns out to be.

It is somewhat reassuring that the 1980-81 expansion was of such short duration that traditional cyclical fatigue had little opportunity to

Recent Inventory Developments

(Annualized percent changes from May to August 1981, based on 1972 dollar data)

	Inventory stocks	*Sales*	*I/S ratio**
Manufacturing and trade	5.2	−3.3	.03
Manufacturing	0.6	−5.4	.02
Durables	2.0	−12.5	.09
Nondurables	−2.6	4.9	−.02
Trade	10.6	−1.4	.05
Wholesale	6.0	−13.5	.07
Retail	14.3	8.8	.02

*Simple change in I/S over designated period.

develop. And it is reassuring also that 1982 will bring the second installment of income-tax cuts.

Those ingredients should act to keep the present drop from becoming severe. But, in view of recent economic surprises, it is perhaps best to avoid hard-and-fast forecasts. At this juncture, the risk in any forecast probably is on the downside.

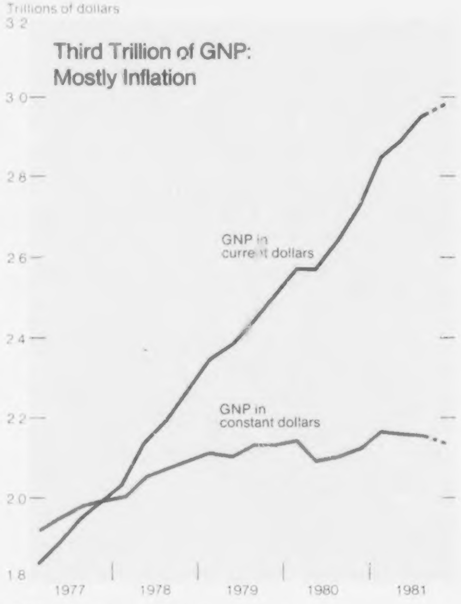
$3 TRILLION—AND COUNTING

IN January 1978, it was forecast in these pages that GNP would reach $3 trillion on April 29, 1982. It appears now that the economy will reach that milestone on December 15, four months and fourteen days ahead of schedule.*

The early arrival of a $3-trillion GNP is mainly the result of being closer to that mark when the forecast was made than was thought at the time. Indeed, the third-quarter 1977 GNP—which served as the base for the original forecast—was subsequently revised upward by $34.5 billion. That rise accounted for nearly three months of the early arrival. The rest is explained by a slightly faster average rate of increase in GNP than was assumed when making the projection.

As it turned out, the actual increase in GNP from the third quarter of 1977 to the third quarter of this year was at a 10.9% annual rate—rather than the projected 10% rate. Unhappily, the composition of that growth rate, as between "real" growth and inflation, was considerably less favorable than had been expected four years ago. Since the third quarter of 1977, the growth rate of real GNP has averaged only a 2.1% annual rate, whereas the GNP deflator has increased at an average annual rate of 8.5%. In other words, of the third trillion dollars of GNP, only about $200 billion will represent additional goods and services. The remaining $800 billion will have been simply the result of higher prices.

For the fourth trillion, The Morgan Bank expects a better trade-off between inflation and real growth. But whether or not this optimism is justified, a 10% annual rate of growth in nominal GNP continues to seem the most likely prospect. If the 10% growth assumption proves correct, GNP will pass the four-trillion mark in barely three years—on December 22, 1984.



Third Trillion of GNP: Mostly Inflation

NOTE Fourth quarter 1981 plottings are estimates

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*The GNP mileposts are flying by at an accelerating pace. The first trillion required over 200 years. The second trillion was added in a little over seven. The third trillion will take less than four years.

Fiscal Stress for States and Localities

A new era of austerity lies ahead for the nation's states and localities. People and businesses all across the country will feel the squeeze as spending is scaled back and new taxes are levied. For many jurisdictions, fiscal deterioration already has led to lower credit ratings. And the prospect of widespread deficits at the state and local level has been a depressing influence on municipal bond markets. While some entities continue in sound fiscal shape, the operating balance* of states and localities as a whole seems likely to slip into a sizable $5-billion deficit in 1982 (chart on page 6).

The slippage underscores the dramatic change that has occurred in the financial affairs of states and localities in the last half decade. Whereas earlier in the post-World War II period state and municipal spending had marched steadily upward year after year, forced retrenchment began to set in during the mid 1970s. The fiscal difficulties of state and local government first became evident with New York City's brush with bankruptcy in 1975, then intensified in the late Seventies with the spread of Proposition-13 type tax revolts and a scaling back of federal aid.

Belt-tightening worked reasonably well in the sense that most states and localities coped successfully in getting their budgets under control. Indeed, the state and local sector as a whole managed to run an operating surplus consistently in recent years. That, however, is expected to change next year, as many budgets slip into deficit.

To restore balance in their accounts and confidence in financial markets, many states and localities have been intensifying efforts to curb spending and raise taxes. During the past year, for instance, outlays for highways, waste treatment, and community development have fallen sharply. And some 30 states have raised taxes by a net $2.5 billion—mainly through higher sales, excise, and oil-severance taxes. In many parts of the country, however, increasing resistance to the paring of programs is apparent—even as voters also are displaying increasing opposition to tax hikes. These conflicting attitudes suggest that many state and local officials will face a major political and fiscal challenge in the years ahead.

An eroding revenue base

Erosion of state and local revenues began in mid 1978 with passage of Proposition 13 in California. Following that vote, a wave of tax and spending limitations that rolled back or indexed personal tax increases and reduced property taxes seriously restrained the revenue growth of many jurisdictions. While governments often were able to maintain spending programs by drawing down surpluses, for many entities this option appears to have run its course. California, for instance, now finds that tax relief measures have depleted its surplus and that further spending cuts are needed in order to avoid large deficits.

A scaling back in the growth of federal aid to states and localities also has contributed to erosion of their revenue base. The curtailment dates from early 1979 when Washington started to phase out local public-works and employment programs. And further retrenchment was herald-

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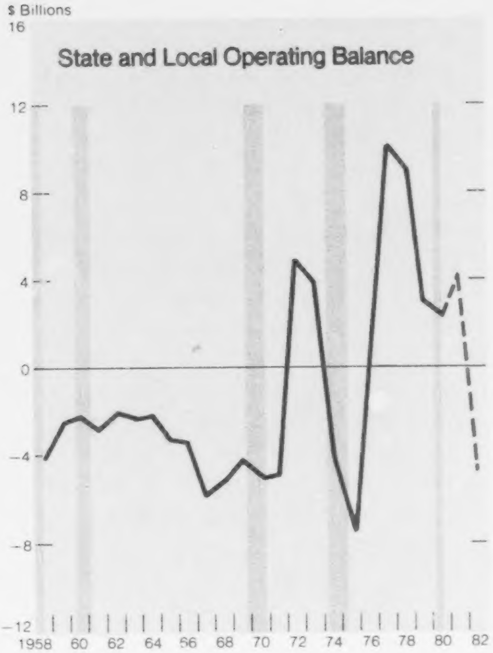
*The operating balance of all state and local governments combined, as reflected in the national income accounts, includes both current and capital budgets; it excludes surpluses registered by state and local pension funds. Before 1972, when general revenue sharing was enacted, the operating balance typically was in deficit, with the deficit financed by long-term borrowing.



ed last March by President Reagan's proposal to wean states and localities from their dependence on federal aid. At that time, the President proposed that federal grants be cut by $14 billion from the almost $94 billion recommended by the Carter Administration for fiscal 1982. The President also recommended that responsibility for many domestic programs be transferred from the federal government to the states, mainly by consolidating narrow grants designed for specific programs or projects into broader block grants with few strings attached.

The reconciliation bill passed by Congress in late June gave the President most of his requests. Under this legislation, federal grants are expected to fall by $7 billion in current dollars, or by 8%, between 1981 and 1982. In "real" (inflation-adjusted) terms, the decline is expected to amount to 14% over the four quarters of 1982; in contrast, federal grants recorded real yearly gains averaging 6% during the past decade (chart on page 7). Since federal aid accounted for more than a fifth of state and local revenues in 1981, the decline in these flows should lead to a significant reduction in state and local activities as many units curtail services, defer maintenance of the capital infrastructure (e.g., bridges, roads, sewers), or turn activities over to the private sector. One area already feeling the pinch in many states is welfare. According to a recent Congressional study, this is the first year since 1973 that fewer than half the states have raised benefits under Aid to Families with Dependent Children, and five states actually have cut benefit payments.

In addition to cutbacks in federal aid, states and localities could see tax collections reduced by almost $2.5 billion in 1982 as a result of passage of The Economic Recovery Tax Act of 1981, according to estimates by the Congressional Budget Office. Cuts in personal tax rates and accelerated depreciation will affect revenues because of the close linkage between state and federal tax systems and the strong reliance of states on the federal corporate tax base.

Three states–Nebraska, Rhode Island, and Vermont–have "piggyback" systems in which personal tax liability is a percentage of federal tax liability; they will face the largest revenue losses from tax-code revision. Seven other states –Hawaii, Idaho, New Mexico, North Dakota, Oklahoma, Oregon, and Utah–use the federal definition of taxable income to compute taxpayer liability. By liberalizing charitable deductions, reducing the marriage penalty, and excluding reinvested dividends, the 1981 legislation has changed the federal definition of taxable income and, hence, will reduce revenues for these states.

Moreover, 35 states having a corporate income tax use federal taxable income as their tax base. In addition, those states that have their own definitions of taxable corporate income have adopted the federal depreciation schedule. Implementation of the newly liberalized depreciation schedule, therefore, could result in a loss of revenues for these entities.

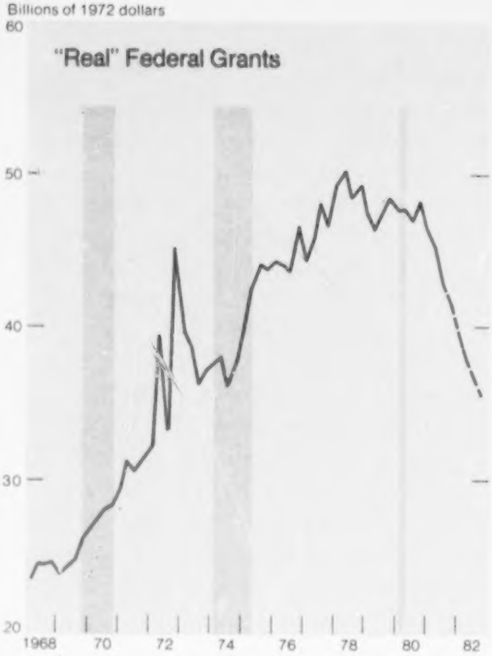
Prospective losses stemming from the 1981 Act have prompted some states to consider severing links with federal tax formulas. Others will need to increase tax rates, redefine income, or adopt new depreciation schedules to offset the effects of the Act. The revenue-raising potential of many jurisdictions, however, may be limited in part by the traditional hesitance of governors and mayors to raise tax levels for fear of giving neighboring locales an edge in the contest to attract new industry.

The recent contraction in the U.S. economy is yet another factor contributing to state and local fiscal problems, since declines in nominal economic growth and consumption act to depress income and sales tax collections. Even with the revenue-raising actions that some 30 states have taken this year, the economic contraction is expected to slow the growth of state and local tax collections to a 9% pace in 1982 from the 11% gain now expected for calendar year 1981.

Market reaction

With the steady erosion of state and local finances—plus the Federal Reserve's tight monetary stance over the past two years—many entities have found the municipal bond market less receptive to their issues than formerly. Such difficulties were particularly acute last summer, when large institutional investors withdrew from the market and bond prices slid to record lows. At the same time, the interest rates that governments had to pay rose to historic highs. The Bond Buyer Index of municipal yields, for instance, hit a record 13.2% in early September. Since then, tax-exempt bond markets have stabilized and interest rates have retreated somewhat. Nonetheless, rates remain extraordinarily high by historical standards, with the result that state and local governments have been postponing trips to the long-term market.

Instead, they have been turning increasingly to the short-term market, e.g., with issuance of bond-anticipation notes. In the first nine months of this year, short-term borrowings by states and localities totaled some $25 billion, 17% higher than in the same period last year. With some congestion building up in the traditional short-term market, a few jurisdictions recently


"Real" Federal Grants

NOTE: Estimates by The Morgan Bank based on National Income Accounts.

have begun issuing tax-exempt commercial paper. In part, this shift toward shorter maturities seems to reflect attempts to carry on projects with short-term funds in the expectation that long-term rates will fall in the months ahead.

Because of their eroding fiscal positions, a number of jurisdictions—e.g., Minnesota, Washington, and Wisconsin—have found their credit ratings downgraded in the past year. Others have been virtually shut out of the market. This happened to Boston, for instance, after passage last November of Proposition 2½, which over the next several years will reduce property taxes in Massachusetts from about 6% to 2½% of a community's full property values. In any event, both increased borrowing and an elevated level of rates in short-term as well as long-term markets have caused debt service to rise sharply as a percentage of total spending for state and local governments.

Further complicating the financing problems of these units is that the unrestricted use of industrial development bonds has crowded traditional tax-exempt borrowers out of long-term markets. In addition, various provisions of the 1981 tax legislation—in particular, the reduction of the maximum tax on unearned income from 70% to 50%, the introduction of the All Saver's certificate, and the liberalization of rules covering leasing (encouraging some investors to shift funds from tax-exempt bonds to tax-exempt leases)—are expected to reduce the attractiveness of municipal issues. This would tend, of course, to raise the financing charges on debt issued by states and localities.

Impact on the business cycle

The financial plight of state and local governments may adversely affect the U.S. economy's ability to withstand sharp fluctuations in activity. Traditionally, state and local fiscal actions have blunted recessionary tendencies, since increases in spending by these units typically have outpaced their revenue collections during periods of economic slack. Welfare and unemployment payments, for example, tended to rise with declines in economic activity while income and sales tax receipts tended to fall. Moreover, growth of state and local purchases (excluding income support payments) has tended to remain strong over the business cycle. This strength has been encouraged by rapid increases in federal grants and by an expansion in demands for public services brought about by a growing population. As a result, the state and local sector grew at a rate substantially faster than the economy as a whole from the end of World War II through the mid Seventies—with state and local spending rising from about 6% of GNP to a peak of 15% in 1975. The sector's rapid growth provided support for over-all economic activity during downward phases of the business cycle.

In the latter half of the 1970s, however, the growth of the state and local sector slowed to about half the previous pace—and its share of GNP declined to around 13%. This reflected a reduction in the size of the school-age population, a decrease in the growth of federal aid, and passage of Proposition 13-type taxing and spending limitations. As a result, for the first time since the end of World War II the state and local sector did not help offset recessionary trends during the second quarter of 1980. Moreover, during the subsequent recovery state and local units failed to provide their usual boost to aggregate economic activity.

This sluggish trend is likely to continue in the year ahead. Between the cyclical trough in the second quarter of 1980 and the fourth quarter of 1982, state and local purchases of goods and services (in constant dollars) are expected to *decline* by almost 1%. In comparison, during the ten quarters following the previous six cycles purchases *rose* by an average 3.7% (table on this page). The current weakness can be traced to a modest decline in employment and a sharp drop in construction relative to past cycles (charts on page 10).

State and Local Activity Over the Business Cycle

(Percent change; compound annual rate)

	1980:2 to 1982:4	*Average of six postwar recoveries in ten quarters after trough**
Total expenditures	7.5	8.4
Purchases of goods and services	7.4	8.7
Purchases of goods and services, 1972$	−0.9	3.7
Construction	—	4.7
Construction, 1972$	−12.4	0.9
Payroll employment	−1.0	3.5
Federal grants	−3.6	11.3
Operating balance ($ billions)	−2.0†	+9.4‡

*Trough quarters are 1949:4 1954:2, 1958:2, 1961:1, 1970:4, and 1975:1.

†Absolute change over ten quarters after trough.

‡Average of last four recessions, due to lack of detailed data on operating balance before 1958.

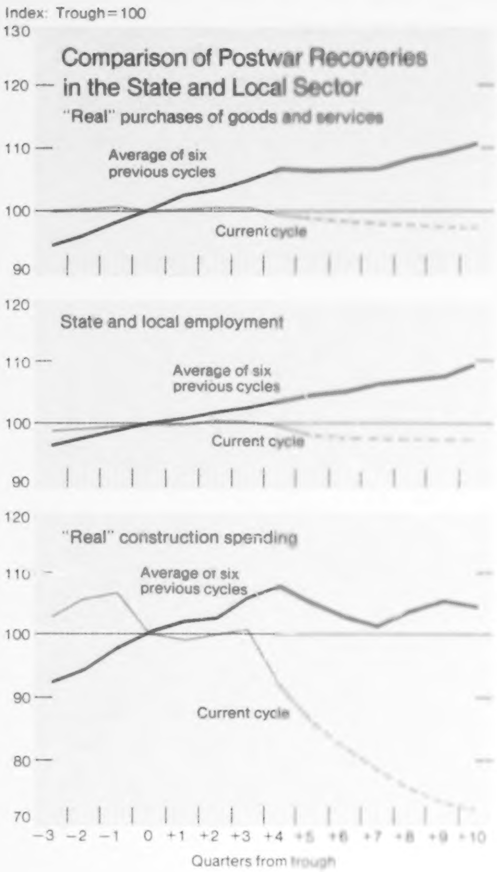
The options ahead

In the next few years, state and local officials clearly will face an unprecedented need to exercise discipline over budgets. Erosion of the revenue base, together with the continuing need to provide essential public services, may well force a scaling back of new capital-spending plans as well as deferral of maintenance on existing facilities. Austerity may also force cuts in programs devoted to improving human capital—e.g., basic education, vocational training, and health care.

Such bad news may have salutary effects. After the rapid growth of state and local activities during most of the postwar period, it is important for these units to recognize that resources are limited and that officials have to sharpen their priority-setting procedures. It is equally important, however, for public officials to recognize that both physical infrastructure and human-capital programs will have to complement private-sector investments in the efforts begun by the Reagan Administration to revitalize the economy and spur productivity growth. Over the long run, in other words, failures at the state and local level to maintain the nation's stock of physical and human capital could detract from achievement of the nation's economic goals.

States and localities obviously have a major stake in the Administration's economic recovery program. Its success would enhance the revenue base of all governmental units, thus brightening the fiscal outlook considerably for many entities. At the same time, a sounder fiscal position at the state and local level would offer greater promise that these entities can actually assume some responsibilities being shed by the federal government.

The transition nevertheless promises to be rough. Benefits from the recovery program may be some time in coming, while the impact of state and local austerity is already being felt in many places. This suggests that increased attention should be paid to easing adjustment problems, particularly in areas—like community


Comparison of Postwar Recoveries in the State and Local Sector

"Real" purchases of goods and services

State and local employment

"Real" construction spending

development and waste treatment—that are most affected by the President's program. Some such steps, in fact, already have been taken. In late September, for instance, Congress permitted some states to delay taking over certain programs recently converted to block grants. More basically, however, Washington policymakers need to face up to the political difficulties of curtailing hitherto "untouchable" entitlement, or transfer, programs. Tackling these programs is essential if federal spending is to be brought under control and the high interest rates that have created severe borrowing problems for states and localities are to fall substantially.

Over the longer term, if the President's aim of shifting responsibilities back to states and localities is to be fulfilled, alternative sources of financing for these entities must be found. The Administration recently suggested that states and localities tap the increase in after-tax incomes resulting from The Economic Recovery Tax Act of 1981. Such actions, however, may find little support from a tax-weary electorate. Moreover, one source of added revenues—increased excise taxes on tobacco, alcohol, and gasoline—may be preempted in the future by the federal government's need to reduce the fiscal 1983 and 1984 budget deficits through "revenue enhancement" measures.

Against this background, states and localities face a tough financial future—one that will require hard political and economic decisions on spending and taxes.

Life at a Bank's Money Desk

A huge volume of payments moves through the U.S. banking system daily. Besides $100 billion or so of checks, some $500 billion more moves from bank to bank electronically on a typical business day.

For banks, the handling of these massive payments involves far more than processing checks, making computer entries, and updating ledgers. A bank has to maintain enough liquidity to handle outgoing payments—that is, to cover any net deposit withdrawals, loan extensions, and securities purchases. It also has to leave enough on deposit at the Federal Reserve to meet its reserve requirements. However, a bank doesn't want to keep more funds at the Fed than are needed to meet those requirements, since that would entail a loss of potential interest income.

The challenge is particularly great at money-center and regional banks. Many customers of those banks—including large corporations, domestic and foreign correspondent banks, and securities firms—manage large money positions themselves and have a heavy volume of financial transactions. They receive and pay out far more each day than they keep in their accounts overnight. These transactions can have a major impact on their banks' reserve positions.

Coping with such money flows is the task of a bank's "money-position" managers. Their main aim is to acquire funds to meet their bank's reserve requirements at the lowest possible cost. Their actions, however, have a wide impact, since the competition for reserves among banks, together with the Fed's supply, determines the level of the Federal funds rate.

Indeed, it is because of this connection to monetary policy that the rules for bank reserve requirements have been such a heated issue. As was discussed in these pages last April, many monetarists object strongly to the existing system of lagged reserve requirements—which bases a bank's required reserves in any week on its deposits two weeks earlier—arguing that it exists simply to make life easier for bank reserve-position managers.* They want a bank's reserve requirements to depend on its current rather than past deposits, asserting that such contemporaneous reserve requirements would enhance monetary control. And earlier this month, in fact, the Federal Reserve requested public comment on a possible change in its rules that would move bank reserve requirements some considerable distance toward the contemporaneous mode.

Clearly, the issue central to such a change is its probable impact on bank reserve management. For this reason, coupled with the importance of bank reserve adjustment in implementing monetary policy, it is worth examining the process from the vantage point of money-position managers.

How money moves around

A bank's reserve account at the Fed is constantly buffeted by the payments and receipts of its customers as well as by its own (as when it buys or sells securities). When the bank is presented through the clearing process with a check drawn on a customer's demand deposit account, for instance, the check is effectively paid through a transfer of funds to another institution from the bank's reserve account at the Fed. Similarly, when checks are deposited at the bank by its customers and then are collected, that raises the bank's balance in its Fed account.

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*"Changing the Fed's Rules on Reserve Accounting," *The Morgan Guaranty Survey*, April 1981.

Most of the activity through a money-center bank's reserve account results not from checks but from large-value electronic payments and receipts on behalf of customers. To make a payment, one of these customers sends an instruction to its bank by cable, computer link-up, or even over the telephone for the bank to pay funds to a specific party with an account at another bank. A clerk then instructs the bank's "money transfer" computer to send out an electronic payment message.

The largest volume of such electronic payments—presently totalling $330 billion a day—is made over a Federal Reserve transfer network known as Fedwire. The sending bank's computer tells another computer at the Fed to transfer funds from the sender's to the receiver's reserve account, and to inform the receiving bank of the transfer. The payment is made instantly—in the form of entries on the books of the Federal Reserve.

Most other electronic payments—presently totalling $180 billion a day, primarily related to international trade or finance—are handled by the New York Clearing House system known as CHIPS. To make a CHIPS payment, a bank transmits the relevant data electronically to the CHIPS computer, which will immediately advise the receiving bank—again, electronically—of all the details. However, unlike transactions via Fedwire, the actual transfer of funds will not occur until later that day. At 4:30 p.m. eastern time, CHIPS stops accepting payment instructions from its members and totes up the day's activity. Offsetting payments between CHIPS members are netted out, and each participating bank is informed of how much it owes other CHIPS participants or is owed by them. Then by 6:00 p.m. all banks owing money to other banks "settle" their CHIPS positions by making payments out of their reserve accounts over the Fedwire (described in the box on page 13).

The ebb and flow of money through a bank's Fed account, much of which results from CHIPS and Fedwire transactions occurring late in the business day, can require a bank's money-position managers to scramble to acquire or dispose of Federal funds late in the day. They neither want to leave more funds at the Fed than are required, nor let their bank's Fed account become overdrawn.[*]

Watching the numbers

In meeting its reserve requirements, what counts for a bank is each day's balance in its Fed account as of 6:30 p.m. eastern time, when the Fedwire shuts down for the night and the Fed strikes a closing balance in each bank's reserve account.[**] A bank does not have to hold the same amount of reserves each day, but rather must maintain an average closing balance in its Fed account over each Thursday-to-Wednesday weekly period which equals or exceeds that week's reserve requirements. Its only latitude is that it can end the week up to 2% short of its requirements. In that event, it has to make up any deficiency in the following week, and it also cannot "under-reserve" in that period.[†]

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[*] The Fed allows banks some leeway to overdraw their reserve accounts during the course of a day's transactions. But if any "intra-day" overdrafts are not made up by the end of the day, a bank faces monetary penalties. It must pay the Fed "interest" on the overdraft at an above-market rate, but still has to make up the overdraft. Thus, the bank ends up paying interest on funds it cannot use to meet reserve requirements.

[**] The Fed allows banks to count the cash in their vaults as part of the funds held to meet reserve requirements. Vault cash meets only a very small fraction of the reserve requirements of large banks, however.

[†] A bank may carry forward up to a 2% excess of reserves from one week to the next, but loses the value of any such excess if it "over-reserves" a second week in a row.

A bank's money-position managers start each day with a target for the bank's account balance at the Fed that evening. Critical to that objective are the customer inflows and outflows which the bank is likely to have, as well as the amount of funds that the bank's own activities may require. That permits a tentative decision concerning what amount to "buy" or to "sell" —i.e., to borrow or lend—on an overnight basis in the Federal funds market. However, that decision is never final until Fedwire closes for the day, for unexpected inflows and outflows can net to a very large amount—sometimes approaching or even exceeding the bank's reserve requirement.

Typically, as the day goes on, a bank can't readily tell whether its estimates of net inflows or outflows is going to be correct. All day long, its balance at the Fed will be changing—up hundreds of millions of dollars one minute, and down just moments later. The bank might need to raise or lower the amount of money it borrows that day in the Federal funds market. But to make the right decision, the money managers need to be able to tell, for instance, whether a 3:00 p.m. shortfall of funds means that they underestimated the day's funding requirements or simply that the shortfall will be made up by customer inflows between then and the close of Fedwire at 6:30 p.m.

If the day is a Wednesday—settlement day—falling below that day's reserve-account target could mean that the bank would not have maintained sufficient funds to meet its weekly-average reserve requirement and would have to borrow from the Fed's discount window to close the gap. Since that can easily wear out a bank's welcome at the window, it will ordinarily try to obtain the needed amount in the funds market. But it is not uncommon for a bank to go ahead in such circumstances and buy additional Fed funds, and then find later on that more money has arrived over the wire. And when that happens, it leaves a bank with an excess of funds to try to sell off within the final moments of the reserve week, a time when most of the banking system is often already sitting with enough funds to meet its reserve requirements and has no interest in borrowing any more money overnight. If the bank could sell the funds, the rate on such a transaction might

CHIPS AND SAME-DAY SETTLEMENT

UNTIL last month, transactions over the CHIPS system—now totalling $180 billion per day—took two days to be completed. Banks would enter CHIPS payments on their books on day one, but wouldn't actually exchange any money until 10:00 the next morning. Thus, CHIPS transactions were said to be made in "next-day funds" while those over Fedwire were on a "same-day" basis.

That sent many bankers home at night wondering whether they would awaken the next morning to find that the banks owing them money in the day's CHIPS settlement had failed—a worry that was highlighted by the failure six years ago of Bankhaus Herstatt. It took until early 1980, however, for the New York Clearing House members to agree among themselves that same-day settlement—with payment at 6:00 p.m. of the day a transaction occurs—was the best way to control the CHIPS credit risk. Then the New York Clearing House and its members had to prepare their computer systems to handle same-day settlement. And planning had to be done throughout the financial system for the change in settlement of Euro-dollar and foreign exchange transactions which comprised the bulk of CHIPS activity. As a result of all the planning, however, the switch to same-day settlement came off without a hitch this past October 1.

well be lower than that at which the funds were previously bought.

Sometimes, of course, other banks do still need reserves up until the very end of the final reserve day to avoid settling their reserve positions by borrowing at the discount window. In such circumstances, a bank with funds to sell could get a premium rate. But on the ordinary Wednesday, a bank has a difficult time judging during the course of the day whether that will be the case.

A $500 million example

Even when it's not a Wednesday, late-in-the-day deposit flows can create significant reserve-position difficulties. For illustrative purposes, consider a money-center bank having a $500-million weekly-average reserve requirement. The day is Friday, and the bank starts out in the morning knowing that Thursday's closing balance was $500 million. The bank plans on holding another $500 million in its Fed account Friday night, and for most of the day there is nothing to indicate that the bank's closing reserve balance will differ appreciably from that amount. However, as the hour gets late, it begins to seem that the bank's balance is going to be somewhat above the projected level. And then interest rates soften substantially late in the afternoon—perhaps because of an unexpected drop in the money stock, as reported by the Fed at 4:10 p.m.—and that is followed by further unexpected inflows of funds. By 6:00, the bank has a reserve balance of $900 million, rather than the intended $500 million.

Unless the bank can sell its excess funds to another institution in the next few moments—and banks are rarely bidding for funds very aggressively late on Fridays, particularly when a low money figure has just surprised the market—the bank will accumulate a substantial reserve excess for three days of its reserve week, relative to its $500 million requirement. Such a reserve excess would sharply reduce the bank's flexibility in managing its Fed account in the remaining days of the reserve-settlement week. After keeping $500 million for one day and $900 million for three days at the Fed, all that the bank would have to keep on the following Monday through Wednesday—for its weekly holdings to average $500 million—would be $100 million per night. Thus, virtually no matter what might happen to the Federal funds rate in the next three days, the bank's latitude to alter its own Federal funds activity would be almost nil.

A similar constraint sometimes arises, moreover, because of computer difficulties. When one bank's computer becomes unable to initiate outgoing payments, as unfortunately happens in the banking system from time to time, both it and other banks are affected. It sits overnight with excess reserve balances, while the banks to which it would have transferred funds are deficient. When the amount of the missed payments is not too large and if there is time remaining in the reserve week, such imbalances can typically be corrected. But it all becomes a matter of arithmetic, and sometimes there is simply no possibility for a full correction.*

Added costs

The abundant possibilities for costly difficulty in managing a bank's reserve position would be increased further if contemporaneous reserve requirements were imposed. The recent Fed proposal, for instance, would impose an essentially contemporaneous reserve system for transactions deposits, allowing only a two-day lag between corresponding reserve computation and maintenance periods.* Thus, to calculate its reserve requirements in a timely fashion, a bank would have to know its reservable transactions-deposit liabilities no later than early in the morning two days later. At present, however, banks have no need to measure their reservable deposits that quickly. And to speed up the process, most banks—particularly those with large branch networks—would need to devote substantial additional personnel and computing resources to the measurement task.

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*Take the case of the above bank with a $500 million reserve requirement which holds $500 million on Thursday. Suppose that, because of a computer problem, it holds $1.5 billion on Friday. Even if it could reduce its reserve balance to zero on Monday through Wednesday—a virtual impossibility—it would still end up having held an average reserve excess of more than $200 million over the reserve week.

Even supposing that banks could measure their reservable deposits quickly enough, other reserve-management complications would probably be associated with contemporaneous reserve requirements. With such a system, a bank's reserve-position managers could be surprised not only by money inflows and outflows—as at present—but also by changes in the reserve-balance target at which they had to shoot. If a bank came into Wednesday, for instance, with a substantial reserve excess from earlier in the settlement period, and then found that its reserve requirements were substantially lower than it had previously estimated, it might well be unable to avoid carrying excess reserves for the period.

The Federal Reserve's specific proposal for contemporaneous requirements would generally help the banking system to cope with unexpected inflows and outflows of funds by lengthening the settlement period to two weeks. But it is still likely that the over-all cost of reserve management would rise at commercial banks. Thus, a vital question is whether such costs seem likely to exceed any policy benefits which might be expected from contemporaneous requirements. That is an issue on which much doubt exists. The Federal Reserve itself is inclined to hedge on the extent to which contemporaneous requirements would improve the linkage between the supply of bank reserves and the money supply.

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*The Fed proposal would double, to two weeks, the length of both the computation and maintenance periods. The two-day lag would apply to transactions deposits, with other deposits subject, effectively, to a four-week lag.

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Economic Outlook. *Recession seems likely to be moderate. Pickup by next spring, with second half reasonably robust. But such a forecast is put forth tentatively. Reasons for caution.* *1*

Wage Trends. *Recession, lower inflation will slow the wage rise. Changes are likely to be moderate, but new elements in the wage picture may be signaling something more dramatic.* *5*

Leasing Boom. *Companies—money makers and money losers—are finding it easier to buy and sell unused tax benefits. The vehicle: tax leasing. There are big implications for corporate finance —and for Treasury revenues.* *8*

Economic Indicators *13*

Monetary Indicators *14*

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Economy Watch

THE flow of recent economic statistics hardly gives off a glow of good cheer. All the indicators suggest that the economy's performance through the winter will be weaker than most analysts expected as recently as a month ago.

Unemployment in November stood at 8.4%, higher than at any time since the 1974-75 recession. Auto sales in November matched the lows during last year's recession—a level below any in the past twenty years. The housing industry, meanwhile, continues to scrape along at the lowest rate of activity in more than a decade.

Even bleaker statistics seem likely in the months ahead. The main reason is the need for the economy to work down excess inventories. That need could be seen in revised third-quarter GNP data, which showed that durable-goods inventories accumulated during the summer at a considerably more rapid rate than had previously been indicated (box on page 4). With the benefit of hindsight, it is clear that the summer's bulge in inventories was the dominating influence that tipped the economy into recession.

A key to how long it will take to work off excessive stocks will be consumer purchases in the crucial Christmas period (when many merchants ring up a fourth to a third of their annual sales volume). The Christmas shopping season got off to a slow start, judging by November reports from the nation's major retail chain stores. In some cases, sales last month were lower than in the same month in 1980, while other chain stores reported a moderate pickup in response to promotional activities. Even these mixed readings are more positive than the concerns voiced earlier by many merchants who were apprehensive that autumn's abrupt deterioration in consumer buying intentions pointed to grim yearend business.

For the current quarter, The Morgan Bank projects a decline in "real" GNP of 5.3% at an annual rate (accompanying table). Weakness is expected to extend into the early months of 1982, with economic activity stabilizing in the spring. And, in the second half, economic activity is expected to be reasonably robust–due importantly to a $45-billion annual-rate lift to disposable personal income scheduled to come on July 1 from the second stage of the tax cut and from a rise in Social Security benefits.

If economic trends turn out that way, the current recession would rank as a moderate one. Assuming that the low point is reached in the first quarter of 1982, real GNP will have suffered a peak-to-trough loss of just under 2%.

That projected pattern for economic activity fits the broad consensus of government and private forecasters. Still, it is put forth with something less than supreme confidence. The ability of economists to divine the future has not been impressive in the past year. Economists generally did not expect the surge in activity in the first quarter (when real GNP climbed at a steep 8.6% annual rate), and as recently as October most economists were not anticipating a recession in 1981. Forecasters did progressively lower their sights as the year wore on (chart on page 3), but the dominant view–until economic activity actually began receding–was that a full-fledged recession would be avoided.

What has plagued forecasts made for 1981–and what makes such exercises for 1982 so uncertain–is the unusual condition of the economy. There is substantial potential for economic growth to make up for the prolonged period of slack in economic activity that began in 1979 and which has left a large unmet need for housing and business plant-and-equipment outlays. Additionally, taxes have been cut and a major military buildup is pumping tens of billions into defense industries.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1981			*1982*	
	Q2	*Q3*	*Q4*	*Q1*	*Q2*
Real GNP	−1.6	0.6	−5.3	−0.[illegible]	3.8
Real consumer spending	−2.1	4.0	−2.2	2.8	2.2
Real business-capital outlays	−2.2	4.3	−9.7	−0.3	2.2
GNP deflator	6.4	9.5	8.5	6.5	6.2
Consumer prices	7.5	11.9	7.8	6.6	6.3
Real disposable personal income	1.4	2.6	2.4	0.1	2.3
Saving rate (%)	5.4	5.1	6.1	5.5	5.6
Housing starts (Millions)	1.18	.97	.86	1.02	1.19
Auto sales (Millions)	7.8	9.1	7.6	8.1	8.2
Unemployment rate (%)	7.4	7.2	8.3	8.5	8.6

NOTE: 1981 Q2 and Q3 data are actual. Approximately one percentage point of the rise in the GNP deflator in the fourth quarter reflects the timing of federal pay increases.

Given those forces, the really extraordinary thing in many respects is that the expansion which began after the 1980 recession was so short-lived. The recovery, which lasted only four quarters, ranks as the shortest since 1913.

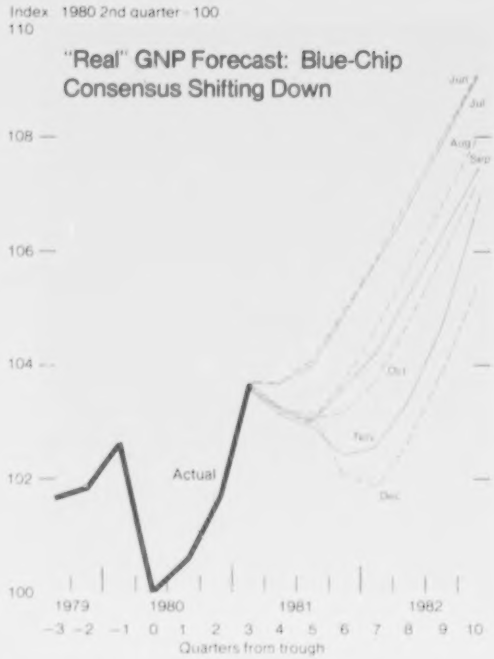
The brevity of the 1980-81 upswing can be explained by Federal Reserve monetary policy. The Fed, in its efforts to undernourish inflation, has clamped down hard on the growth of money. In the past year, for example, M1B (narrowly defined money supply) has grown by only 3.6%, roughly half the rise in the previous year. As a consequence, interest rates were pushed to record highs, severely constraining activity in credit-sensitive industries and ultimately generating summer's mini-bulge in inventories.

Even though some progress toward lessened inflation is being recorded (with this bank's projections anticipating further slippage in the rate of increase in 1982 to about 7% for both the GNP deflator and the CPI), that progress has not been sufficient to justify any material change in basic Fed policy. The presumption must be, therefore, that 1982 will continue to see the Federal Reserve keeping the economy on a decidedly shortened ration of money. Whether money growth targets will prove accommodative enough to permit significant reacceleration in economic activity during the second half (as is now commonly forecast) without a renewed upward interest-rate movement is uncertain.

The conflict between economic growth and monetary policy is apparent from the consensus view as to how much expansion is likely in nominal GNP between the fourth quarter of 1981 and the fourth quarter of 1982.

In general, most forecasters anticipate an increase in nominal GNP over that span on the order of 10% to 12%. By contrast, the Fed has tentatively set a maximum allowable rate of M1B growth for the period of 5½%. Under these circumstances, obviously, money would have to "work harder"; that is, the velocity or "turnover" of the money supply would have to rise. Historically, sharply increasing money velocity has been accompanied by a rise in interest rates. That could well be the consequence once again. And if interest rates were to rise appreciably again, that would raise questions as to whether cyclical expansion could be sustained for any length of time in 1983. The unanswered question is whether the economy will repeat this year's start/sputter pattern.

A final, and crucial, element in the outlook is the news that will be tumbling out of Washington next month—particularly the budget for 1983. Financial markets will be waiting to see how President Reagan responds to the formidable challenge of getting his budget-disciplining effort back on track. Advance reports in the press paint a grim budget picture—with preliminary deficit numbers in excess of $100 billion in the current year and even larger amounts of red ink in fiscal 1983 and 1984. Administration officials, while not denying the huge numbers, have emphasized that renewed efforts to slash spending—and proposals for selective tax increases—are sure to reduce those preliminary deficit numbers.


"Real" GNP Forecast: Blue-Chip Consensus Shifting Down

NOTE: The Blue-Chip consensus is an average by Eggert Economic Enterprises of 40 forecasts.

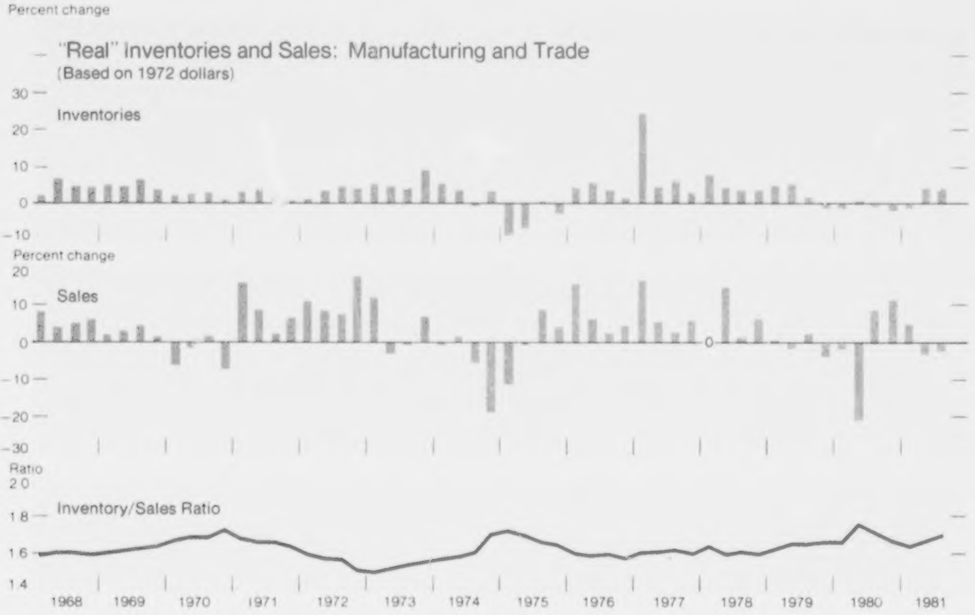
Financial market reaction in early December to the worsened budget outlook clearly was negative. The urgent need is for credible pro-

TRENDS IN BUSINESS INVENTORIES

It now appears, retrospectively, that the punishment of high interest rates had a cumulative wearing effect on sales activity and generated an inventory buildup during the summer—an overhang that extended beyond autos, where excessive stocks caused problems at various times throughout the year.

Data lags plague prompt recognition of inventory overhangs, but inventory-sales ratios seem to have begun moving up quite sharply in July both in durable-goods manufacturing and nonauto trade establishments. Moreover, the situation apparently deteriorated through October, with inventory/sales ratios in some sectors moving back to levels seen prior to the 1980 recession.

The inventory bulge does not seem particularly large compared with rates of inventory increase in previous years. But it does look large relative to the very tightly disciplined control of inventories that prevailed from late 1979 through the early part of this year (accompanying chart). A moderate inventory correction is now under way that probably will extend into early 1982. Christmas retail volume will heavily influence inventory behavior.


"Real" Inventories and Sales: Manufacturing and Trade
(Based on 1972 dollars)

posals for working down the deficit over a period of years. Continued apprehension in financial markets would work against any sizable decline in long-term interest rates—a decline that is essential to renewed vigor in housing and capital investment.

Wage Gains: How Much Slowing Ahead?

THE rise in wages in the year ahead seems sure to slow from this year's pace. The reason, of course, is that the two most important determinants of wage change—unemployment and inflation—will exert a restraining influence.

Unemployment has held above 7% of the workforce for the past year and a half and is expected to remain above 8% for all of 1982. Inflation, meanwhile, has slowed from 12.7% in 1979 (based on changes in the consumer price index) to roughly 9½% this year—with further easing to about 7% a good prospect for the year ahead.

In that environment, wage-rate gains seem certain to slow. But by how much? If the record of the past two decades is any guide, only a moderate slowing can be expected. But there are new elements in the wage picture which could be signaling a considerably more rapid slowing in wage gains—if not next year then perhaps in 1983.

Wage insensitivities

In recent years, wage gains have shown remarkably little sensitivity to short-term economic developments. For example, the 1974-75 recession, the most severe in forty years, reduced the rate of wage increase by only about one percentage point.

In the unionized sector, wage inflexibility can be explained by the prevalence of three-year contracts, which mandate wage increases until the next bargaining cycle. And when bargaining does take place, wages are negotiated on the basis of expected trends over a three-year period, not just on current conditions.

Wages in the nonunionized sector, curiously enough, show a similar pattern of rigidity. The chief reason seems to be that employers do not adjust wage rates in response to short-term developments. Instead, most employers, viewing their relationship with workers as a long-term one, tend to keep wages rising in line with what they perceive to be the general trend.

If wage rates continue this earlier pattern during the current cycle, wage-rate increases in 1982 probably will reach 8%, down only a percentage point from the 1981 rise. But that moderate decline ignores two significant new elements in the wage picture which were not present in earlier cycles.

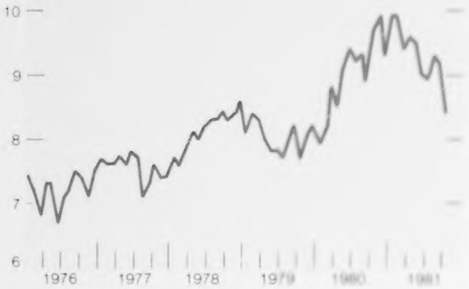
- One union after another, worried about rising unemployment and the threat of business failures, has been giving up wage gains, accepting wage freezes, and some have even taken reductions in wages. There hasn't been anything like this on the labor scene since before World War II.
- The Federal Reserve has shown staunch determination to wring inflation out of the economy—pursuing a consistently restrictive policy unmatched in the postwar years. This restraint has pushed the economy into its second recession in as many years.

What are the chances that these two new elements—consistently restrictive monetary policy and a new willingness of some unions to moderate earlier wage gains—will bring about a more dramatic slowing in the pace of wage inflation? Such a slowing is not indicated by wage patterns thus far. The rate of increase in all three of the most widely followed indexes of wage rates, to be sure, is no longer pushing upward (charts on page 6). The employment cost index and the index of compensation per man-hour have been moving sidewise since the

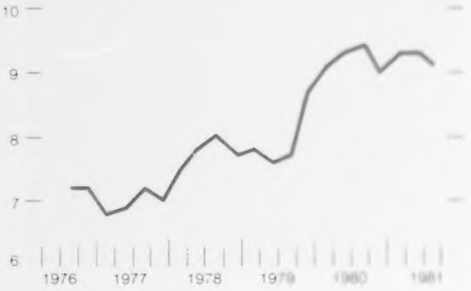
Percent change from year ago

Latest Trends in Wage Rates

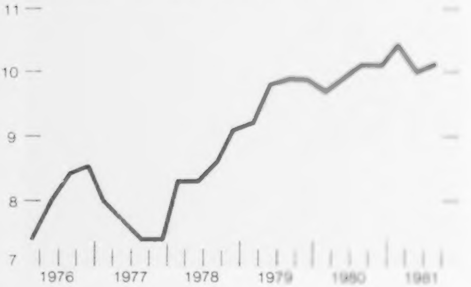
Average Hourly Earnings



Employment Cost Index



Compensation per Man-hour



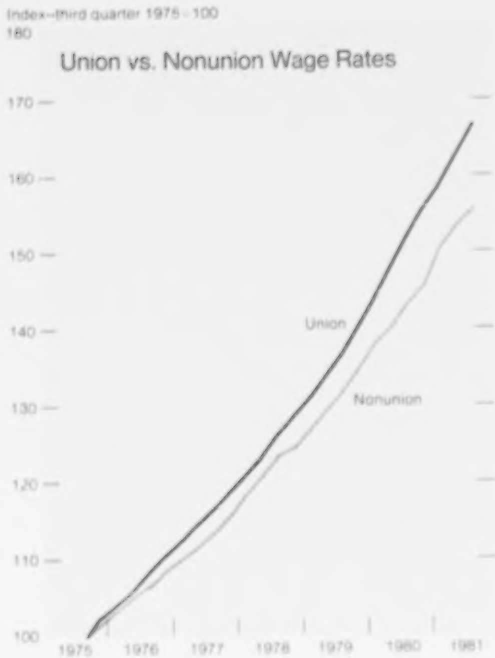
NOTE: Average hourly earnings are adjusted to remove the effects of interindustry shifts and changes in overtime hours in manufacturing. Compensation per man-hour is for private nonfarm production and nonsupervisory workers and covers the costs of benefits as well as wages. The employment cost index and hourly earnings cover only wages.

beginning of the year. And the rise in the more volatile average hourly earnings series has decelerated noticeably—particularly during the past six months. This improvement, however, is no more than would have been expected on the basis of past cyclical experience.

There is little evidence, either, that a dramatic slowdown is imminent. Even though the Federal Reserve has pursued two years of very restrictive credit policies, recent surveys indicate that inflation expectations, while showing somewhat lessened fears, nevertheless reflect continuing concern about the future trend of prices. Long-term interest rates, despite some recent easing, remain historically high. Thus, there is little reason for optimism that an improved inflation outlook is about to lead to markedly reduced wage demands.

Nor is there much evidence that the downward pressure on some union wage rates is about to spread throughout the economy. For one thing, such pressures toward union wage moderation are by no means universal. In many industries, unions are pushing as hard as ever for higher wages. And pay packets of the huge service industries seem not at all affected.

Where the downward pressures on wage gains are evident, two forces (beyond the weak performance of the economy) are at work. The first is the increased competition being faced by a number of industries. In the case of trucking and air transport, the increased competition is the result of the loosening of government regulations which has allowed new companies to enter these industries. Many of these new entrants are not unionized, have lower labor costs, and thus have put a squeeze on union wage scales. In other industries—autos is a good example—increasing competition from abroad has been critical in moderating union wage rates. The increase in the value of the dollar in foreign



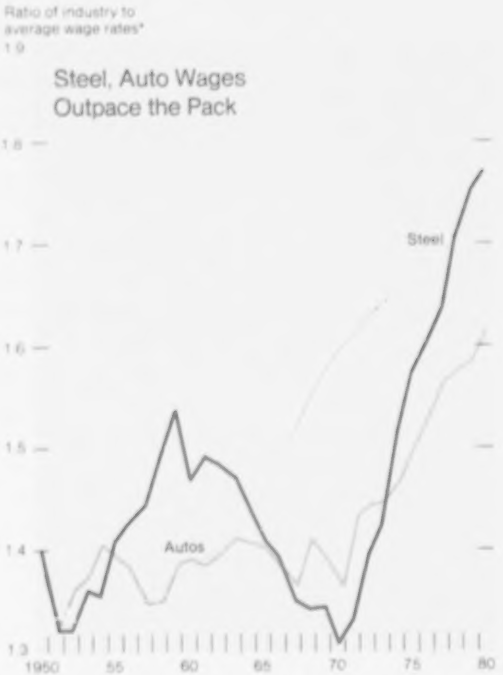
Union vs. Nonunion Wage Rates

exchange markets has contributed to the intensification of foreign competition.

The second key factor behind the current downward influence on wages in some parts of the labor market is the rapid pace of wage increases for union members since the early 1970s. In just the past six years, union wage rates have risen by 10% more than have wages of nonunion members (chart above). The increase in relative wages has been particularly sharp for several of the larger unions. For example, during the 1970s, the wage rates for steel and auto workers increased by 20% and 30% respectively more than did wages generally. This startling rise in relative union wage rates was far out of line with underlying economic conditions and has made wages in those industries vulnerable as the economy has weakened and as competition has grown more intense.

The current squeeze on key union wage rates, therefore, appears to be largely a relative wage phenomenon and may well have little bearing on general wage trends. Just as nonunion wages did not rise in step with union wages during the 1970s, they are not likely to slow to the same extent now. Since unionized workers account for only about 20% of the labor force, general wage trends may be affected very little.

During the past decade, wage-rate changes have been very "sticky"—responding only partially and with a lag to sharp swings in inflation and unemployment. Despite new elements in the current environment and some prospective slowing in wage-rate increases, no breakthrough in the trend of wage rates is in sight.



Steel, Auto Wages Outpace the Pack

*Average hourly earnings of production workers in steel mills and in motor vehicle manufacturing plants divided by average hourly earnings of all private nonfarm production and nonsupervisory workers.

Leasing Gets a New Lift

THE nation's thriving leasing industry—with volume over $25 billion in 1980—is getting a dramatic new impetus from The Economic Recovery Tax Act of 1981. Spurred by the new tax law, leasing could dramatically alter the financing of capital formation in this country. The revenue cost to the Treasury, however, could be steep—adding to already intense budgetary pressures.

New leasing rules essentially make it easier for corporations to buy and sell tax benefits.* Companies with little or no earnings can sell unused depreciation deductions and investment tax credits to profitable companies that want to lower their tax liabilities. The companies selling the tax benefits—those either showing losses or having excess deductions and credits from large capital spending programs—would thus get an infusion of funds. (The box on page 9 describes a simple example of such a tax lease arrangement.)

Industry response to streamlining of leasing provisions has been dramatic. In the initial round of new leasing transactions—the deadline was November 13 for closing lease deals on equipment purchased during the first seven and a half months of this year—total leasing volume is estimated by industry sources at well over $10 billion.

By industry, sales of tax benefits were concentrated in airlines, railroads, motor vehicles, electric utilities, and primary metals (accompanying table). All of these industries fit the mold of the typical leasing candidate, with actual losses or with profitability low relative to the tax benefits associated with heavy capital investment programs. Of those companies that purchased tax benefits, electrical machinery, communications, and other services were most prominent—all industries with relatively large tax liabilities.

Leasing deals, of course, are nothing new. Over the years, leasing activity has spawned a

Leasing Scorecard: Tabulation of November 13 Tax Lease Closings

	Sellers	*Buyers*
Number of Announcements	42	26
Industry composition	*(Percent)*	
Airlines	14	—
Railroads	14	8
Electric utilities	12	—
Communications	2	12
Other services	2	19
Transportation equipment producers	12	—
Primary metals	12	4
Energy and mining	14	8
Stone, clay, and glass	5	—
Electrical machinery	—	35
Miscellaneous	12	15

NOTE: This Morgan Bank tabulation of leasing deals published in *The Wall Street Journal* over the November 9-19 period provides a representative sampling of actual closings.

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*The principal reason the market for tax benefits is now more attractive is the recent liberalization of depreciation write-offs. The service life of most capital assets will be shortened by at least a third when corporate tax changes become fully effective in 1986. Moreover, leasing provisions themselves have been made more appealing by broadening the definition of equipment eligible for leasing, by permitting property ownership to be transferred back to the equipment user—once the lease has expired—at a small or nominal cost, by eliminating the restriction that the leasing transaction had to be structured so as to show a profit for the purchaser of tax benefits, by allowing the user of the property to provide financing for the lease-sale arrangement, and by cutting in half (to 10% from the previous 20%) the minimum investment required by the company buying the tax benefits.

AN EXAMPLE OF TAX LEASING

TAX lease deals can be enormously complex. The following example highlights the basic elements of a typical transaction.

Assume that Company A needs to purchase $100 million of assembly-line machinery. The company projects that it cannot use all of the tax benefits associated with the investment (the investment tax credit and depreciation write-offs).

Utilizing the new tax leasing rules, Company A orders and takes delivery of the equipment. Company B–typically one with a significant tax liability–then buys the "tax ownership" of the equipment for, say, 25% of the value or $25 million in cash. This entitles Company B to the tax benefits arising from the machinery purchase. For tax purposes Company B is obligated to "pay" the balance due on this purchase. In reality, Company A makes such payments either from internal funds or by obtaining a loan. In either case, Company B is deemed to have assumed a debt obligation on the balance due. Such debt assumptions are for tax purposes only and then are "repaid" by Company A through a schedule of rental payments that cover the debt service associated with Company B's debt. This rental arrangement is only "on paper" and, in actuality, no cash will change hands between the two companies except for the original cash payment.

Both companies benefit.

Company A has been able to acquire the equipment for well under $100 million and has the opportunity to deduct that cost as rent over the term of the lease.

Company B will have recovered, in the early years of the lease, most of its $25 million initial investment and also will have had the interest-free use of substantial amounts of money from the deferral of taxes it would have otherwise paid. (This is the same benefit the user of the equipment would have had from tax credits and accelerated depreciation deductions if it had had sufficient taxable income against which to offset such deductions.)

dynamic and growing industry–with banks, other financial institutions, and corporations handling leasing activities through subsidiaries.

The chief purpose of leasing all along has been to provide an alternative to the direct and many times quite costly acquisition of capital assets by the corporate sector. That purpose is no different under The Economic Recovery Tax Act of 1981. What is different now is that the new tax rules have made it much easier for *all* firms to reap tax benefits associated with capital investment, whether or not they are profitable enough to use those benefits themselves.

Backers of the new tax rules stress that this is critically important in encouraging growth of the economy's undernourished capital stock. Certainly, newer firms, with ambitious investment programs, often require investments in capital assets which can be expected to generate little income in the early years. Unless such firms have significant income flows from older assets, depreciation deductions and tax credits can go to waste. An obvious remedy: transfer such benefits to companies that can use them. Additionally, older and relatively unprofitable companies, with outmoded production facilities, would be given an assist in their drive toward reindustrialization.

Moreover, proponents argue, an easing in tax leasing provisions, which encourages transfer of tax benefits, will also reduce the piling up by companies of unused tax deductions and credits. In the past, this has been a prime lure for tax-motivated and potentially uneconomic mergers.

Explosive growth ahead?

Industry's dramatic response to the new leasing rules may, in fact, be only the beginning of a more protracted surge in leasing activity. Indeed, industry officials describe the recent bulge in leasing volume as "only the tip of the iceberg."

Measuring the volume of leasing activity—in order to put the flurry of recent deals in some perspective—is hampered by a lack of comprehensive statistics. One important source of data is an annual survey conducted by the American Association of Equipment Lessors (AAEL). The most recent survey showed new leasing volume of the AAEL membership at $10.2 billion in 1980 (accompanying table). That number is estimated by AAEL to represent only 55% of over-all leasing activity. On that basis, the economy's gross flow of leasing business would have been about $20 billion—an estimate industry analysts consider to be on the low side. Moreover, these figures exclude the volume of car leasing activity, which some industry experts estimate to be in the vicinity of $15 billion annually.

Not all leasing activity shown in the AAEL survey would qualify, of course, under the tax-based schemes currently getting attention. Ordinary operating leases—e.g., the short-term rental of construction machinery—would not be considered for tax leases. Such operating leases account for about 15% of leasing activity (column three of the adjoining table). Moreover, AAEL estimates about a third of direct-financing leases are for purposes other than the exchange of tax benefits. On that basis, tax leasing deals nationwide amounted in 1980 to roughly $12 billion—about 6½% of all investment in producers' durable equipment as measured in the GNP accounts.

Tax leasing is estimated to have increased about 25% in 1980. With November 13 closings already bringing this year's tally to well over $10 billion—and with a steady flow of stepped-up leasing activity likely in the final four and a half months of this year—the growth rate of tax leasing deals could easily double in 1981. And no end is in sight.

One indication of leasing's big potential is the

Leasing Activity in 1980

(Millions of dollars)

	Direct finance leasing	*Lever-aged equity leasing*	*Operat-ing leases*	*Total leasing volume*
All Industries	5,514	3,038	1,662	10,214
Computers	1,009	380	311	1,700
Office machinery (ex-computers)	805	—	249	1,054
Production machinery	844	292	101	1,237
Transportation equipment	838	1,966	668	3,472
Construction machinery	336	—	123	459
Agricultural machinery	369	—	45	414
Medical equipment	353	—	47	400
Nonproduction machinery	403	—	47	450
Other	557	401	71	1,029

SOURCE: 1981 Survey of Accounting and Business Practices, American Association of Equipment Lessors.

NOTE: Respondents represent approximately 55% of total domestic volume of new lease business.

LEASING'S POTENTIAL

THE potential for tax leasing activity is ultimately constrained by the pool of unused corporate tax write-offs—that is, the volume of tax credits and depreciation deductions that are not used as offsets against taxable corporate profits. Data on such unused deductions are hard to come by. The latest complete IRS tabulation of corporate income tax returns is only available for 1976. That report indicated that while corporations claimed investment tax credits totaling $9.2 billion, they would have been entitled to another $7.5 billion if they had been more profitable. Today's volume of actual tax credits is running around $17 billion—suggestive of a dramatic increase in the pool of unused credits.

The adjoining table provides industry detail on unused tax credits during 1975—industry figures are not available for 1976. (Due to the complexities of various depreciation options, comparable data are not available for unused depreciation deductions.) While the data are over six years old, there is little reason to suspect that the distribution of unused credits by industry has shifted dramatically. If it has not, manufacturing firms—especially metals producers, motor vehicle companies, and integrated petroleum and coal concerns—seem likely to be the chief beneficiaries of tax credit sales. Outside of the manufacturing sector, public utilities and transportation service companies would seem to have the greatest potential for selling tax benefits. In view of the industry tabulation of leasing deals closed on November 13, these 1975 statistics appear to have been a good predictor of leasing's "industry mix."

Unused Corporate Tax Credits

(Based on 1975 corporate tax returns)

	Unused credits ($ mils.)	*Number of returns (000)*	*Unused credit per return ($)*
All Industries	6,220.4	290.3	21,425
Manufacturing	1,972.9	47.8	41,292
Petroleum and coal	514.7	0.5	1,031,427
Primary metals	367.4	1.1	320,286
Motor vehicles	105.5	0.5	197,282
Chemicals	125.0	1.8	68,657
Other	860.3	43.8	19,652
Nonmanufacturing	4,247.5	242.6	17,511
Public utilities	694.2	2.4	284,987
Transportation	1,574.7	14.3	110,363
Mining	302.8	3.2	95,289
Communication	115.9	2.5	46,720
Other	1,559.9	220.2	7,084

SOURCE: 1975 Statistics of Income, Internal Revenue Service.

fact that the volume of unused investment tax credits—benefits which can now be easily transferred by a tax lease—appears to be quite large for the economy as a whole. Indeed, tabulations by the Internal Revenue Service of 1976 corporate tax returns (latest year available) indicated that unused credits were about 80% as large as actual credits claimed. If this relationship between actual and unused credits has held up over time,[*] then the current total of actual credits—estimated by the Treasury at around $17 billion annually—would imply a pool of unused credits in the $10-billion to $15-billion range. With the tax credit rate currently set at 10% of eligible equipment, leasing volume could grow to well in excess of $100 billion in order to facilitate the transfer of such unused credits. Thus, recent leasing activity has hardly made a dent in the potential recapture of the total volume of unused tax credits (box on page 11). Moreover, tax credits are only part of the picture. Depreciation reform virtually guarantees that unused capital cost recovery write-offs will be as large as unused tax credits.

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[*] IRS corporate tax tabulations indicate that over the 1962-76 period the cumulative volume of unused tax credits was 94% of actual credits claimed.

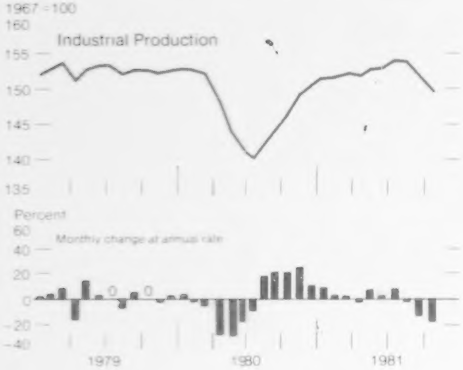
Implications

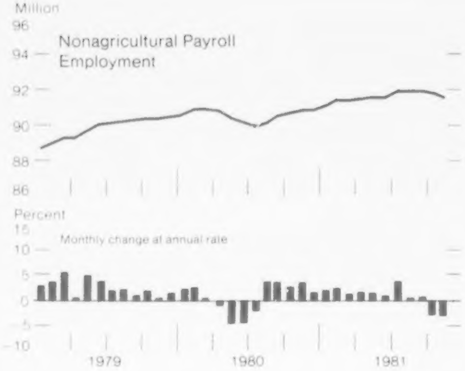
The new tax rules have radically affected leasing—both for companies that are money makers and for money losers. Distressed companies in many instances suddenly are benefiting from capital infusions. While a positive development in the case of some companies, the growing amounts of capital now being put in the hands of relatively unprofitable enterprises raises questions of efficient resource allocation.

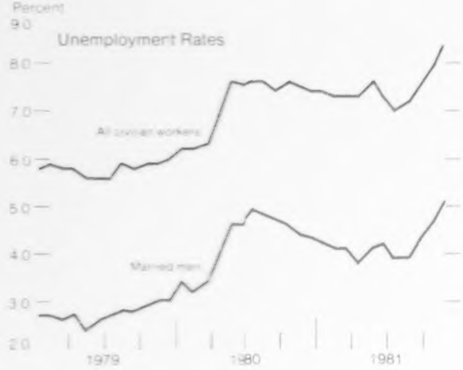
There are big implications, too, for U.S. Treasury revenues. Such capital infusions, of course, have reduced the tax burdens of many profitable companies—a reduction that is slicing into U.S. tax revenues. Treasury estimates of revenue losses from leasing activity start at $3 billion in fiscal 1982, climb to around $5 billion in 1983, and reach about $8 billion in 1984. If the leasing boom continues, as most industry analysts expect, the Treasury runs the risk of seriously understating the potential for revenue loss. Recognizing the possibility of an open-ended drain on Treasury tax revenues, some lawmakers already are proposing a second look at leasing provisions.

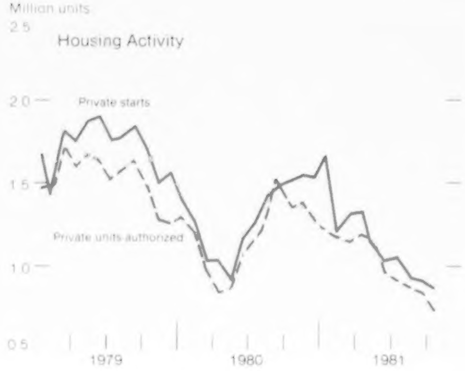
At a time of fiscal austerity, as the government struggles to get the budget under control, the fiscal impact of leasing clearly needs to be carefully monitored. If tax leasing turns out to make existing deficit strains even more acute, then the resulting pressures on bond markets could work against the well-intentioned capital-spending impetus.

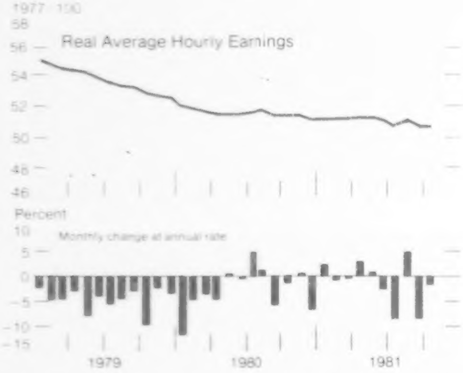
ECONOMIC INDICATORS

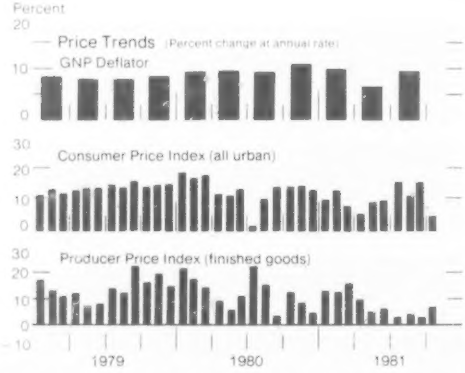






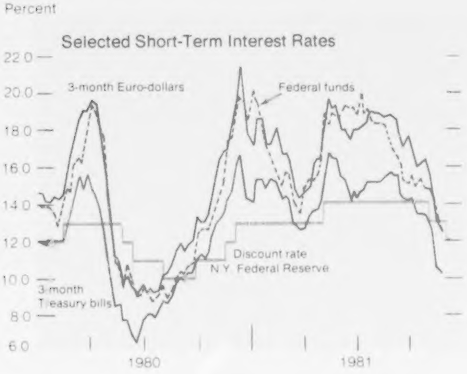


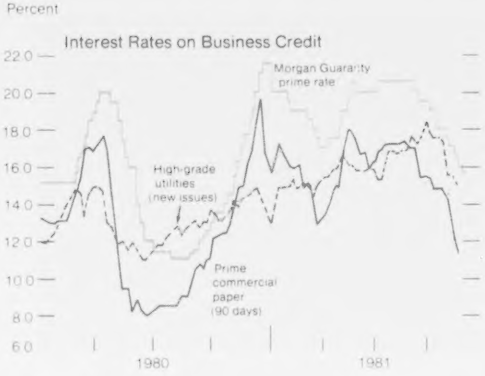


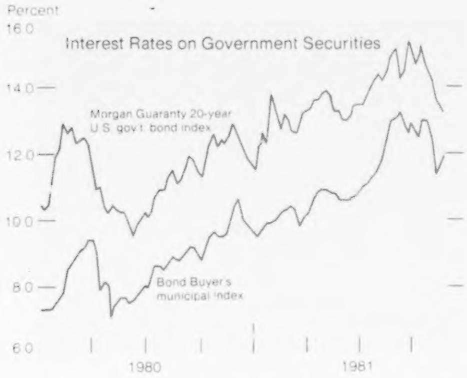


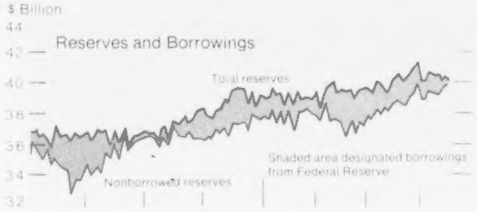
NOTE: All data are seasonally adjusted. Average hourly earnings are adjusted for overtime hours in manufacturing and for interindustry employment shifts.

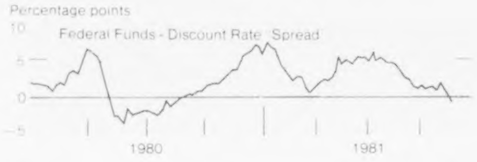
MONETARY INDICATORS

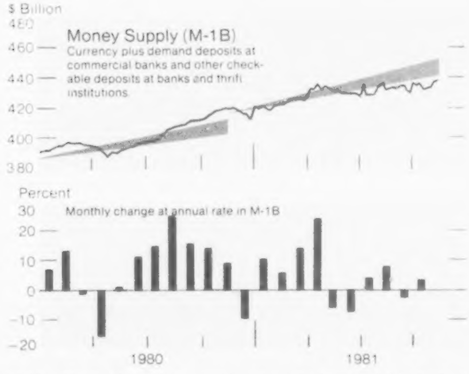


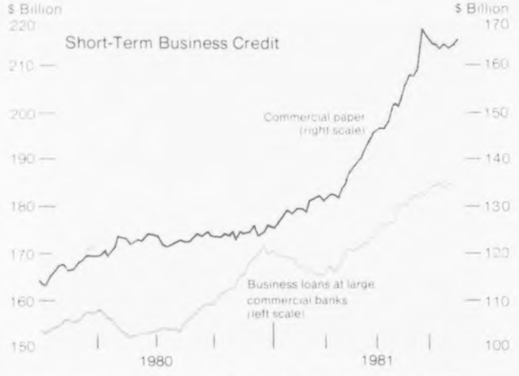












NOTE: Shaded areas on the money supply chart represent the Federal Reserve growth targets for the periods from the fourth quarter 1979 to fourth quarter 1980 and from the fourth quarter 1980 to fourth quarter 1981. Business loans are net of bankers acceptances. All data except interest rates and member bank borrowings are seasonally adjusted.

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Economic Outlook. *The recession may have hit bottom. Signs point that way. Expect sluggishness this quarter, but recovery should start in the spring. In prospect: a fairly brisk second half as midyear tax cuts take hold.* 1

Debt Strategy. *Changes are being urged in the way the U.S. Treasury manages the public debt. Among them: eliminate sale of long-term bonds, issue "purchasing power" securities. Big implications for investors, financial markets.* 3

Health Care. *The new Rx to hold down skyrocketing medical costs: competition. President Reagan soon will unveil his prescription. Patients, employers, hospitals, doctors, and insurers are sure to feel the effects.* 9

Economy Watch

THE economy is showing signs of bottoming out. Even though the evidence is as yet sketchy, the holiday season was not the disaster for the nation's retailers that some analysts had feared. Initial claims for unemployment insurance leveled out in December after steep rises beginning last September. And even some key November statistics suggested that the decline in economic activity was being arrested.

Housing starts, for example, rose slightly after having fallen almost continuously since January of last year. Sales of new single-family houses rose for the second month in a row. Manufacturers' new orders for durable goods turned up after several months of decline. And construction spending appeared to be stabilizing after declining throughout 1981.

How quickly a recovery will get under way will depend mainly on the reaction of businessmen to their inventory situations. Between August and November, the inventory-sales ratio for all manufacturers rose from 1.61 to 1.73, the highest level since the 1980 recession. But most of the increase in the ratio was the result of declining sales rather than additions to stocks. Indeed, the increase in physical inventory of unsold manufactured goods has been quite small in total. Probably a similar situation exists with regard to the inventories of wholesalers and retailers, but analysts cannot be sure. The reason is that data on retail-wholesale stocks for the crucial December period will not be available until next month.

While inventories do not appear to be grossly excessive, continued efforts to reduce stocks will probably depress production in the weeks ahead enough that "real" GNP this quarter will show some decline from the fourth quarter of 1981. But by the second quarter, The Morgan Bank believes, inventory liquidation should have run its course. With a boost from the second phase of the tax cut at midyear, the economy could be moving along at a pretty good clip in the second half.

But there, of course, is the rub. A pickup in economic activity would likely raise the public's demand for money balances sufficiently to conflict with the Federal Reserve's money-growth targets. The probable result would be a return to higher interest rates. This suggests that the credit-sensitive sectors of the economy, in particular housing and automobiles, will continue to labor under adverse monetary conditions. That is the basis of The Morgan Bank's forecast of 8.3 million car sales in 1982 (including imports), which is less than the 8.5 million cars sold in 1981.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1981			*1982*	
	Q2	*Q3*	*Q4*	*Q1*	*Q2*
Real GNP	−1.6	1.4	−5.3	−0.5	3.3
Real consumer spending	−2.1	3.3	−2.3	3.7	1.7
Real business-capital outlays	−2.2	7.1	−11.0	−1.2	2.8
GNP deflator	6.4	9.9	8.3	5.5	6.7
Consumer prices	7.5	11.9	7.8	6.2	6.5
Real disposable personal income	1.4	2.6	1.5	0	2.7
Saving rate (%)	5.4	5.2	6.1	5.3	5.5
Housing starts (Millions)	1.18	.97	.87	1.00	1.18
Auto sales (Millions)	7.8	9.1	7.3	8.2	8.2
Unemployment rate (%)	7.4	7.2	8.3	8.5	8.5

NOTE: 1981 Q2 and Q3 data are actual. Approximately one percentage point of the rise in the GNP deflator in the fourth quarter reflects the timing of federal pay increases.

Fed policy

A more immediate concern, however, is the recent rapid growth in the monetary aggregates, which appears to have exceeded the Fed's current short-run targets. The logic of the Fed's money-targeting procedures would require at least some tentative moves toward restraint. There is already some evidence that monetary policy has become less accommodative. The Federal funds rate has backed up significantly from its low of around 12% in early December. Some of the rise in the funds rate (and in rates generally) may be associated with seasonal credit flows and therefore be transitory. But unless growth of the monetary aggregates abates quickly, the chance of renewed declines in interest rates any time soon seems slight.

The Fed is clearly mindful of the experience of 1980, when earlier and more aggressive moves toward monetary restraint in the summer might have obviated the need for record high rates by winter. In retrospect, the acceleration in money growth in mid 1980 was signaling an earlier-than-anticipated economic recovery. But money is hardly an infallible guide to current economic activity. In the spring of 1981, for example, money growth accelerated sharply while the economy was in fact softening. The Fed's aggressive response at that time put downward pressure on an already weak economy, setting the stage for the current recession. With long-term rates now having already retraced more than half of their recent decline, there is a risk that monetary restraint could choke off the incipient recovery.

Managing Treasury Debt: Are Changes Needed?

THE national debt, now over $1 trillion, seldom makes headlines even in the financial press. Congressional debates on raising the statutory debt limit—rarely a forum for serious discussion of budget issues—typically are relegated to the back pages. Lately, however, the public debt—and how it is being managed by the U.S. Treasury—has attracted considerable attention.

Economic analysts in growing numbers are suggesting that financial strains in the economy require changes in the way the Treasury handles the mammoth borrowings it makes to finance the government. Some analysts are urging that the Treasury stop selling long-term bonds entirely. Restricting government borrowing to short- and intermediate-term securities, they claim, would leave the long-term market more open to corporations—with the hope of reducing financial risk for the over-all economy.

The Treasury's decision before the quarterly refunding in November to continue to meet part of its needs with long-term funds came only after very intensive review and debate at the Treasury itself. Beryl Sprinkel, Under Secretary of the Treasury for Monetary Affairs, in particular, argued strongly that issuing long-term securities at the high interest rates prevailing late last year demonstrated a lack of faith in the Administration's own forecast that interest rates will decline as inflation decelerates in coming years. For now, the Treasury has decided to go ahead with its established funding strategy—including raising a limited amount of long-term funds. But the issue is far from dead.

Congress and the Administration, meanwhile, are considering other new approaches for handling the national debt. One legislative proposal would authorize the Treasury to sell 8-to-20 year "purchasing power" bonds—securities whose value at maturity would be linked to rates of inflation. Any increase in the nominal value of such securities, moreover, would be nontaxable. Separately, the Treasury—in order to enhance the attractiveness of fixed-rate savings bonds—has asked Congress for authority to link the returns on savings bonds, if they are held at least 5 years, to yields on 5-year Treasury notes.

In short, managers of the nation's federal debt are exploring new approaches. The outcome could turn out to be of significance to everyone from the worker who buys savings bonds on the payroll plan to the corporate treasurer who is competing for long-term funds with government borrowing. For investors, suggestions that the Treasury eliminate issuance of long-term bonds, if they should gain new support, could add uncertainties to already troubled financial markets.

Defining the debt

The Treasury's responsibilities for debt management, of course, go beyond raising the funds needed to finance a given year's budgetary deficit. There is the continuous need to provide for the refunding of maturing debt—by Treasury bills, notes (in the 2-to-10-year maturity range), and bonds—in a manner least disruptive of financial markets.*

That is particularly challenging when the debt of the government is concentrated, as it has been in recent years, in relatively short maturities. At present, almost half of the Treasury's "marketable" debt is scheduled to mature within one year—and that is true despite efforts in recent years to lengthen the average maturity of the debt.

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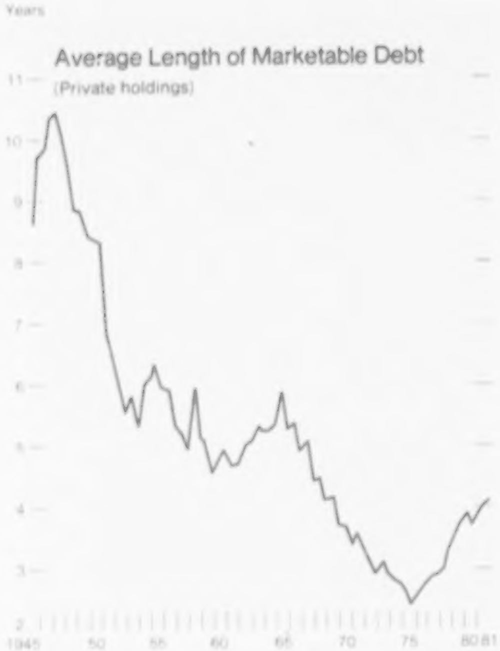
*Treasury debt managers also must plan to meet highly seasonal cash needs since large revenue inflows occur in the April-to-June period while expenditures tend to be spaced fairly evenly throughout the year. For this reason, so-called cash management bills, scheduled to mature when tax receipts are strongest, have been added to regular offerings of bills, notes, and bonds.

Much of what is classified as public debt—and subject to the statutory ceiling—represents intergovernmental transactions. For example, of the total of $998 billion of public debt outstanding at the end of fiscal year 1981, $208 billion were accounted for by the accumulated surpluses of federal-employee-retirement, Social Security, and other trust funds which by law must be invested in government securities. Additionally, $124 billion represented the holdings of the Federal Reserve System—purchases the System has made over the years to expand the reserves of the banking system and facilitate growth of the money stock. Without those two special accounts, federal debt at the end of fiscal year 1981 amounted to some $666 billion. Four broad categories make up that debt total:

- Some $68 billion were held by individuals in "nonmarketable" savings bonds (nonmarketable in the sense that a holder can sell his savings bonds only to the Treasury).*
- About $20 billion represented nonmarketable special issues sold largely to foreign central banks in transactions related to foreign exchange support operations. (Approximately $5 billion of these securities are denominated in foreign currencies.)
- Some $24 billion were classified as "other" nonmarketable securities, almost all of which were a temporary investment outlet for the proceeds of bond issues by state and local governments.


Average Length of Marketable Debt
(Private holdings)

- The remainder—$554 billion—represented the marketable debt held by "private" investors—somewhat of a misnomer since it includes assets held by state and local government pension funds and the international reserves of foreign central banks. In recent years, Treasury securities have been an important vehicle for the investment of the balance-of-payments surpluses of oil-exporting countries—supplementing demand from traditional investors: commercial banks, thrift institutions, and individuals.*

Postwar trends

Over the years, marked change has occurred in the maturity distribution of the marketable debt held by private investors. The debt, as measured by its "average maturity," has grown appreciably shorter—forcing the Treasury to tap credit markets at closer and closer intervals.

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*Redemptions of savings bonds in recent years have been outpacing sales by a wide margin as a result of relatively unattractive yields. Net redemptions that have totaled $21 billion in the past two fiscal years have meant all the more marketable debt the Treasury has been obliged to raise.

*At the end of 1978, as much as $138 billion (27%) of all U.S. public debt securities other than those held by the trust funds and the Federal Reserve System were owned by foreign investors. While that percentage had slipped to 20% at the end of fiscal year 1981, it was still larger than the holdings of U.S. commercial banks and about as large as the holdings of individual investors in the U.S.

In the early postwar period, the average maturity stood at 10½ years—reflecting the emphasis on long-dated securities to finance World War II (chart on page 4). Because of that emphasis, almost one fourth of the marketable debt at the end of the war was in the form of securities with maturities in excess of 20 years (table on this page).

From the peak after World War II, average maturity began a long trend downward due to the gradual shortening in the maturity of wartime debt that came with the passage of time and due to Treasury policy during the 1950s of refinancing maturing wartime issues with short-dated securities.

The strategy the Treasury followed during those years largely reflected the difficulty of raising long-term funds in both recession and expansion periods. Neither time was viewed as suitable—quite apart from the fact that a relatively limited supply of long-term funds at all times made it necessary for the Treasury in peacetime to fund the major share of its requirements in the short end of the market.

The policy objective in periods of boom was to curb the liquidity of the economy—an argument for relatively long-dated security issuance. But it was precisely at those times, with financial markets already stretched to meet the long-term credit demands of private borrowers, that the Treasury found it difficult to market long-dated paper. Such a strategy, it was reasoned during the 1950s, would strain the capital markets even further. The added concern was that the government would be locked into high financing costs long after a boom had run its course and interest rates had returned to more "normal" levels.

Maturity Distribution of Marketable Debt

(Percent)

End of fiscal year	*Within 1 year*	*1 to 5 years*	*5 to 10 years*	*10 to 15 years*	*15 to 20 years*	*20 years and over*
1946	32.7	13.1	22.0	4.6	4.6	23.0
1950	27.2	33.0	5.0	6.6	11.4	16.7
1955	32.0	25.2	22.1	11.1	7.3	2.2
1960	38.4	39.6	11.0	6.4	0.5	4.2
1965	42.0	26.9	18.8	1.2	2.8	8.2
1970	45.4	38.5	6.8	2.4	2.1	4.7
1975	51.9	32.3	8.5	1.9	2.7	2.7
1980	46.5	32.9	9.0	3.9	2.1	5.6
1981	46.7	32.0	9.0	3.6	2.7	6.0

Constraints seemed to apply even when a business boom faded. The Treasury was reluctant to finance long term during periods of recession—despite receptive markets and comparatively low interest rates. Added supplies of long-term Treasury issues, the fear was, would put upward pressure on long-term interest rates generally and impede the recovery of private capital investment and economic activity.

Largely for these reasons, the Treasury limited its long-term borrowings to small amounts during all of the 1950s (offering only about $10 billion of securities with maturities of 10 years or more). Most of these funds were raised just after the recessions of 1953-54 and 1957-58, when recovery forces seemed to be securely in place but interest rates were still comparatively low.

With the Treasury out of the long-term markets except for brief periods and in small amounts, average maturity of the debt had shortened considerably by the late 1950s. And the concern was that the public's holdings of Treasuries—by becoming more and more liquid—were potentially a source of inflationary pressures. To achieve better balance in the debt structure—and at the same time to permit relatively long-term issues to be absorbed smoothly by the market—the Treasury opted for a program of "advance refunding" of much of the remaining wartime debt. Under that technique, used extensively in the first half of the 1960s, the Treasury offered holders of securities approaching maturity the opportunity to exchange them for new issues with longer maturities—in effect, giving the Treasury a ready-made market for long- and intermediate-term securities without the market impact that entirely new issues might have caused.

Holders participating in such a "bond for bond" exchange benefited from higher yields—particularly since many of the securities refunded were 2½% wartime bonds. There was the added inducement to investors to participate in the exchange, since any capital loss on the old securities could be deferred until the new securities matured or were sold. All told, some $68 billion were placed in eleven advance refundings during the period from 1960 to 1965—the principal reason why at least for a while the long-term trend toward a shorter average maturity was arrested* (chart on page 4).

Ceiling problems

By the mid 1960s, however, advance refunding efforts had to be abandoned. Interest rates had risen to levels that ran afoul of a long-standing statute prohibiting Treasury securities of over five years to maturity from carrying a coupon in excess of 4¼%. Under 1967 legislation, securities maturing in seven years or less became exempt from the ceiling. And the Treasury made full use of the new provision. Still, with a heavy volume of notes and bonds maturing and new issues of bonds still foreclosed by interest-rate ceilings, debt managers once again were forced to rely disproportionately on the short-term credit markets.

Such reliance, moreover, coincided with mounting needs to raise funds to finance the budgetary deficits of the late 1960s and early 1970s. Excessive reliance on short-term financing, Treasury Secretary Connally said in Congressional testimony in 1971, "is not a healthy situation. . . . While the absorptive capacity of the short-term market is normally large, in this uncertain world it is hardly appropriate to test the limits of that capacity unnecessarily. At best, we are vulnerable to any recurrence of high rates and tight money; at worst, the heavy volume of maturities can jeopardize our ability to finance in an orderly manner." Moreover, he warned [with remarkable foresight on the eve of a major secular rise in interest rates], "it would be imprudent to refrain entirely from medium or long-term financing in the hope that market rates will soon decline. . . . The possibility of increases, as well as hopes of declines, must be considered in appraising possible costs. . . . We cannot afford to arrange the financing program of the government on the basis of uncertain expectations as to the future level of interest rates."

Under insistent urging by the Treasury during the 1970s, Congress gradually relaxed the 4¼% interest-rate ceiling—at first authorizing the Treasury to borrow up to $10 billion in bonds at market interest rates and subsequently raising that amount in progressive steps (to $70 billion today) whenever the borrowing authority was exhausted. Moreover, under 1976 legislation, notes were redefined by raising the maturity of those securities exempt from the 4¼% ceiling to 10 years.

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*The importance of the advance refundings for the maturity structure of the debt can be gauged by the fact that in 1965 roughly 60% of the government's debt maturing after 15 years had been sold under this arrangement.

Those changes paved the way for renewed efforts to achieve better balance in the Treasury's debt structure which had become worrisomely short by the mid 1970s—down to a postwar low of 2½ years. The Treasury's concern was that frequent and heavy "rollover" of short-dated debt was posing unnecessary risk to the stability of credit markets. And, a shift from shorter to longer maturities was seen as one means of blunting the stimulative impact on the economy of the large budgetary deficits foreseen for the late 1970s.

The debt lengthening in recent years has been achieved mainly by offering intermediate- and long-term coupon issues on a regular basis. In each of the past three years, for example, the regular quarterly refunding package typically has included 3-year and 10-year notes and a long bond (usually with a 30-year maturity)—in amounts totaling about $8½ billion per quarter. In addition, in recent years, 2-year notes have come on a regular monthly schedule and 4-year and 5-year notes and 20-year bonds have been issued each quarter. Just this year, 7-year notes were added to regular quarterly offerings of coupon securities. At latest count, average maturity of the debt had moved up to just over four years, about the same length as in 1968.

Progress in lengthening the debt, limited as it has been, would quickly vanish if long-term issues now were to be circumscribed or abandoned by Treasury debt managers. And, any benefit to the government in the form of lower interest expense—predicated on lower inflation and commensurately reduced long-term interest rates—is far from assured. That argument for "funding short" could have been made many times during the 1970s—and indeed it was. But as the record of continued rise in inflation and in interest rates underscores, confidence in such an outcome was misplaced. That record points up the risk of shocks to the price system—shocks that have made it difficult to have very strong conviction that long-term interest rates at any particular time are only "temporarily" high.

Current debate

Treasury debt managers themselves concede that they have been in no better position than the marketplace to predict interest-rate trends. And it is for this reason—along with the imbalance in the debt structure that had developed by the mid 1970s—that the Treasury has opted for a strategy of diversification in its debt offerings. It, like any other borrower, must be mindful of unpleasant surprises and of the possibility of lost opportunity to fund its needs at the lowest possible cost. Clearly, the Treasury's absence from long-term markets in the late 1960s and the early 1970s because of ill-conceived interest-rate ceilings was a costly mistake for taxpayers.

Any decision by the Treasury to stay out of the long-term market, of course, would hinge on issues that go beyond the narrow objective of minimizing the government's interest expense. Debt-management strategy, it is argued, must take into account the fact that the U.S. economy's financial structure has grown more fragile in recent years. The concern especially is that corporate borrowers—faced with persistently high long-term interest rates in recent years—have tended to fund their needs disproportionately in short-term credit markets, giving rise to considerable erosion in liquidity. The worry, of course, is that firms carrying a heavy burden of short-term debt are especially vulnerable to rollover difficulties in a period of volatile interest rates.

It is not at all clear, however, that the Treasury's staying out of the long-term market would provide greater scope for corporations to restructure their debt. Such an outcome depends on whether the composition of Treasury debt in fact affects the relationship between short- and long-term yields—a relationship depicted in a yield curve. And that, in turn, depends on the way that long-term interest rates are determined.

Two theories

Basically, there are two competing theories. One—the "expectations" hypothesis—is that investors are largely indifferent as between holding short- or long-term assets, and concerned only with obtaining the highest expected yield. The typical investor, the presumption is, is largely indifferent between purchasing a two-year security at an annual yield of 10%, for example, and purchasing a one-year security yielding 8% as long as he expects one-year rates to rise to 12% a year from now. In such a world, long-term rates are merely an average of current and expected short-term rates—and thus supplies of securities of different maturities have no bearing on relative yields.*

The second theory holds that investors have strong preferences between short- and long-term securities. Life insurance companies and pension funds, for example, are seen as having a preference for bonds so as to "match" the long-term nature of their liabilities. Accordingly, relative supplies of securities matter a great deal because each segment of the maturity spectrum is a self-contained market.

Studies designed to measure the effect of the composition of Treasury debt on the relationship between short- and long-term yields have tended to support the expectations hypothesis; they imply that changes in the composition of the Treasury's debt will not have a major impact. That is not to say that all investors are indifferent as between the extreme of purchasing a 3-month bill and a 30-year bond. Rather, most of them are ready to substitute between adjacent maturities when yield differentials, current and prospective, become attractive. Changes in supply or demand in one maturity range—through a continuous process of changes in investors' portfolios—thus are transmitted throughout the whole maturity range.

Precisely how strong the linkages are and how quickly they interact are far from settled issues, however. Even if the Treasury were able to "shift the yield curve" (raising short-term yields and lowering long-term yields) by forgoing bond offerings, it conceivably would create added uncertainty in financial markets in the process. Forgoing bond offerings inevitably would raise questions as to what maturities would be put in their place; how regularized new or added offerings would be; how long the Treasury in fact would remain out of the long end of the market—all questions that would make it difficult for portfolio managers to plan as they are able to do under the present regularized pattern of Treasury financing. The acceptance of financial markets would depend on the degree to which the Treasury could convince participants that it would follow through on the announced specifics of any new funding stategy.

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*A refinement of the theory is that long rates, in addition to reflecting average current and prospective short rates, will include a premium to compensate the investor for the liquidity he gives up upon purchasing a long-term asset. The premium also compensates the risk-averse investor for the risk he assumes that the long-term asset will decline in value if interest rates rise before the security matures.

However, the precedent for change in debt-management strategy would have been set—making it exceedingly difficult for the Treasury to be very convincing.

No change needed

Continued issuance of long-term bonds by the Treasury also has the virtue of fostering broad investor participation in the market for government securities. To the extent specific preferences exist for long-term securities, that end of the market must be nourished so that it will still be there in the future.

In addition, the Treasury's staying in the long-term market can help to improve the functioning of the futures market, whose liquidity depends on supplies of new issues. The same point is made about the corporate-bond market itself—that a reasonably predictable supply of long-term Treasuries encourages investors to purchase corporate bonds, since it affords them the opportunity to move back and forth between corporates and Treasuries in a more liquid market.

On balance, it seems prudent for the Treasury to continue to have access to various maturity areas, given the large amount of government borrowing in prospect for the next several years—and given that maturities, even now, are still relatively short in historical context. Efficient placement of the added debt will be a challenge even in the best of circumstances. Surely, the credibility of the Administration's forecast of lower interest rates will hinge more on the kind of effort it makes to moderate the growth of the total debt rather than on changes in funding strategy.

Curbing Health-Care Costs

THE cost of health care in this country has been spurting upward year after year, with no end in sight. A day in the hospital, on average, now costs almost $300, double the charge just five years ago. A visit to a physician's office averages $40, half again as much as in 1975. Such charges rose at an 11.8% average annual rate between 1975 and 1981, far outpacing the rise in the cost of living (chart on page 10).

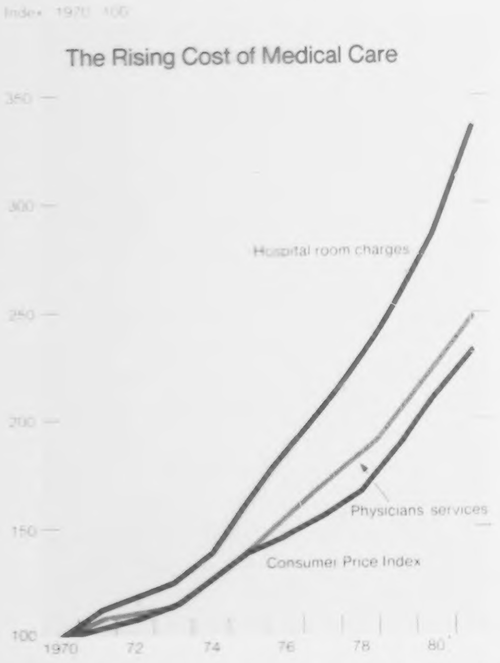
To be sure, this country excels in the quality of its health care. But soaring medical costs have forced stiff increases in insurance premiums for both employers and workers. All the while, taxpayer-financed government programs (Medicare for the elderly and Medicaid for the indigent) have witnessed a veritable explosion in spending, as shown in the table on page 11. If the trend continues, this nation by 1990 will be allocating close to 11% of its total output for health care, nearly double the proportion in 1965 (chart on page 10).

The Reagan Administration, worried about the sharp rise and seeking to avoid past governmental failures (box on page 14), has been readying new initiatives. President Reagan's approach, expected to be unveiled in the near future, will be aimed at injecting more competition in the health-care sector. The idea is to realign the health-care market for insurers, physicians, and hospitals in order to hold down costs. Already, early reports of Administration strategy have touched off a controversy within the health-care industry that seems likely to grow. The unsettled question: What is the best way to introduce competition?

Reasons for the rise

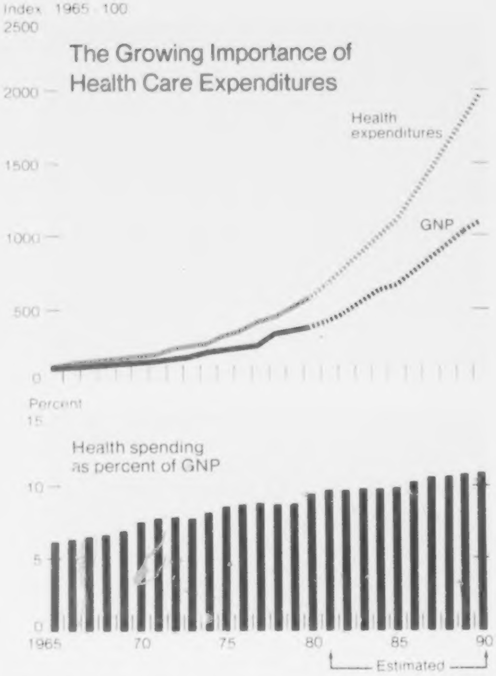
The climb in health-care costs can be attributed partly to an aging population* and partly to the improved quality of medical care. But the overriding reason for the rise, in the view of many analysts, is that the rapid spread of "third party" (private insurance and government) payments has increased the demand for health care. In 1950, individuals paid almost two thirds of the cost of health care out of pocket, with private insurance and the government picking up the rest. By 1980, this proportion had been reversed. While the increased coverage is a financial lifesaver for many individuals facing large health-care bills, many analysts stress that third-party payments have blunted patients' sensitivity to cost increases and thus have increased the demand for expensive services.

Moreover, third parties typically reimburse hospitals and physicians for all reasonable costs. A cost-based reimbursement system in effect rewards those health providers who supply more and costlier services. Rather than encouraging health care providers to develop more economical methods, the current payment mechanisms encourage the use, and in many instances the overuse, of new and more costly diagnostic and therapeutic procedures.



The Rising Cost of Medical Care

NOTE Plottings for 1981 are Morgan estimates based on annual rate of increase in the first ten months



The Growing Importance of Health Care Expenditures

SOURCE U.S. Health Care Financing Administration

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*There are now 26 million people age 65 and over in the U.S.–11½% of the population. Thirty years ago that age group accounted for only 8% of the total population.

Financing Personal Health Care

(Billions of dollars)

Source of funds	*1950*	*1955*	*1960*	*1965*	*1970*	*1975*	*1980*	*1981 est.*
Direct consumer payments	7.1	9.1	13.0	18.5	26.0	39.0	70.6	76.0
Private insurance	1.0	2.5	5.0	8.8	15.6	30.1	58.1	66.8
Government (federal, state, and local)	2.4	3.6	5.2	7.7	22.5	46.1	86.4	100.8
Other	.3	.4	.5	.8	1.0	1.6	2.9	3.1
Total	10.9	15.7	28.7	35.8	65.1	116.8	217.9	246.8

In addition, the existence of third-party payments—together with the dependence of patients on their doctors for technical advice—may have allowed physicians to raise fees without resistance. With a physician's fees considered "paid" by a patient's insurance, and with a patient unprepared in many cases to make his or her own health-care choices, neither the physician nor the patient considers costs when determining a treatment plan. Moreover, concerns about malpractice suits probably encourage overtreatment, and overtesting, by physicians who feel forced to practice with one eye on avoiding future litigation.

Reagan prescription

During the past few months, the Administration has been preparing legislative proposals aimed at reducing the growth of medical costs by infusing competition into the health-care sector.* The key initiatives being considered:

Multiple-choice option. Employers would be required to offer their workers more than one health plan. Individuals would be able to switch coverage during an open-enrollment period in order to satisfy their anticipated health-care needs.* To protect their present enrollments and to expand their business, insurers would be forced to compete for enrollees by offering a variety of health-care packages—ranging from high-benefit plans with complete dollar coverage to low-benefit plans with substantial cost-sharing by the patient. Supporters of the multiple-choice option claim that, to survive in this competitive environment, many health insurance providers would join with physician groups and hospital networks to hold down medical treatment costs and premiums.

Not all sectors of the health-care industry agree, however, that the multiple-choice option would produce positive results. Some analysts feel that the effect would be simply to increase competition among health insurers, leaving the providers of health care—primarily hospitals and doctors—relatively untouched. Since competition is already keen among some 700 private insurance companies and the 140 Blue Cross-Blue Shield plans, the multiple-choice plan could even work against the existing competitive mechanisms that now hold premiums down. An employer, for example, may be in a better

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*A number of bills—H.R. 850 by Representative Gephardt and S. 433 by Senator Durenburger—which espouse the competitive approach have already been introduced in Congress.

*Currently, employers are required to offer an Health Maintenance Organization option when one is available in the employee's residential area.

Expenditures on National Health Care

(Billions of dollars)

	1950	*1955*	*1960*	*1965*	*1970*	*1975*	*1980*	*1985*	*1990*
Type of expenditure									
Hospital care	3.9	5.9	9.1	13.9	27.8	52.1	99.6	189.5	354.7
Physicians' services	2.7	3.7	5.7	8.5	14.3	24.9	46.6	87.5	150.3
Drugs and drug sundries	1.7	2.4	3.7	5.2	8.0	11.9	19.2	29.6	44.4
Dentists' services	1.0	1.5	2.0	2.8	4.7	8.2	15.9	29.9	52.0
Nursing home care	0.2	0.3	0.5	2.1	4.7	10.1	20.7	44.6	81.9
All other	3.2	3.9	5.9	9.2	15.2	25.5	45.2	81.1	137.7
Total	12.7	17.7	26.9	41.7	74.7	132.7	247.2	462.2	821.0

SOURCE: U.S. Department of Health & Human Services: Health Care Financing Administration

bargaining position with the insurance industry if it is free to negotiate and insure with one firm rather than with many firms. In other words, the employer can now offer an insurance company the cost economies associated with a large number of participants. An employer may lose that leverage when it must provide more than one plan to its employees. Furthermore, the cost of establishing and administering multiple plans as opposed to one plan may be substantial.

Critics of the multiple-choice option also contend that healthy individuals would tend to gravitate toward low-coverage insurance plans while those anticipating large medical bills would tend to gravitate toward high-benefit plans. In the insurance industry this is known as "adverse selection"—adverse in the sense that the insurance company finds that demands for medical payments under the high-benefit plans climb well above the norm based on actuarial expectations. Such shifts actually have taken place in health-insurance programs for federal employees, who have a high- and low-benefit option under the Blue Cross-Blue Shield plan.

Tax proposals. To complement the multiple-choice option, the Administration health proposal is likely to contain a number of reforms in the tax code for both individuals and business firms. Among tax initiatives under consideration is a ceiling on tax deductions of employer contributions for health insurance. With reduced deductions, analysts believe that employers might offer plans with more limited coverage.

Another proposal that has been put forth would limit an individual's deductions for medical expenses to amounts in excess of 10% of adjusted gross income, rather than the current 3%. Alternatively, individuals would receive a refundable tax credit equal to 60% of the actuarial cost of a standard health plan. If an individual chose a high-benefit plan, he or she could supplement the credit with extra out-of-pocket insurance payments. This would allow individuals to choose the health plan that best satisfied their needs. Because high-option coverage would require more out-of-pocket payments by the consumer, the tendency to overinsure would be reduced and with it the tendency to overutilize health-care services.

The proposal to put a ceiling or "cap" on the amount of an employer's tax deductible health insurance spending has run into objections from both insurers and private employers. They contend that a national cap would not take into account geographical differences in health costs. Ford Motor Company, for example, pays an insurance premium of $215 a month for a family living in Michigan but on a national basis the premium averages $165 per month for the same coverage. Varying the tax limitation by jurisdiction and region obviously would greatly complicate the tax code.

Voucher plan. To curb open-ended expenditures for Medicare and to reduce the federal government's contribution to Medicaid,* the Administration is reported to be considering a voucher system for both the elderly and the poor. Under the plan, Medicare and Medicaid recipients could receive vouchers to purchase health insurance from qualified private insurance plans. Private plans would be required to offer coverage equal to or better than that provided under Medicare and Medicaid. Individuals choosing a plan that cost less than the voucher's value would be able to keep the difference or use it as a credit toward future insurance. In essence, the objective of the voucher scheme would be to force people to consider the cost of health insurance and to economize on their coverage. The plan also would adjust the vouchers to reflect personal characteristics of the enrollees, such as age, sex, disability status, and geographic location. The aim would be to eliminate the possibility of poor risks being charged prohibitively high rates and to equalize health-care costs and benefits.

The voucher system has run into opposition. One reason is that, under current Medicare regulations, hospitals and doctors are reimbursed at less than full charges. For example, Medicare reimbursements in the past two years have averaged 17% below regular hospital charges. Hospitals and doctors make up the difference by increasing charges to private insurers and individuals. To obtain the same level of health benefits from private companies as is now provided under Medicare, the elderly population would need a dollar volume of vouchers far exceeding current Medicare expenditures. If these additional federal outlays were not forthcoming, the elderly would have to carry the increased costs through higher out-of-pocket payments. Rather than achieve a cost saving, therefore, the voucher system might actually result in increased public and private spending for the same level of benefits.

If the value of the vouchers was held down for budgetary reasons, private insurance companies would be unable to offer medical insurance competitive with the current Medicare program. As a consequence, the insurance companies would face the difficult task of marketing health plans with benefit levels far below those now received by the elderly under Medicare. Under these circumstances, it might be difficult to induce private insurers to participate in the voucher program.

Some analysts also contend that insurance companies would tend to select better health risks, leaving older and sicker people without adequate coverage. As noted earlier, the Administration plan reportedly would try to limit such a "skimming" process by linking the vouchers' value to age, disability, health status, and geographical area. Such efforts, however, would require considerable additional regulatory authority to insure uniform and equitable

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*Also under consideration for the 22.5 million Medicaid recipients are "co-payment" charges—requiring the poor to pay $2 or $3 a day for hospital care and $2 for a doctor's visit. Backers say that such charges would deter excessive use of Medicaid services.

CURBING COSTS: ATTEMPTS THAT FAILED

OVER the years, the spiral in health-care spending and the need for budget restraint have prompted the federal government to search for ways to curb costs. Much of the containment effort has focused on reducing waste associated with unnecessary care. The assumption was that such care contributed importantly to skyrocketing costs and that its elimination would help curb increases. Unfortunately, these efforts have failed to produce budgetary saving or price restraint. Among the attempts:

Review organizations. In 1972 a network of Professional Standard Review Oganizations (PSROs) was set up. The purpose of PSROs was to monitor the care given to Medicare and Medicaid patients and to determine if the care was needed and of good quality. Studies showed, however, that PSROs did not produce enough savings to pay for the costs of the program. The Reagan Administration has begun to phase out the program.

Health Systems Agencies. To moderate the growth and duplication of hospital facilities, Congress in the mid 1970s established a network of regional Health Systems Agencies (HSAs). These agencies were charged with developing plans for health services and reviewing requests for hospital expansion. The idea was to insure an even distribution of health resources and to stop the overbuilding of hospitals. Under the regulations, state authorities needed HSA approval before a "certificate of need" could be issued for hospital construction or equipment purchases. Like the PSRO program, the Health System Agencies were shown to be ineffective in limiting hospital expenditures. The program will be phased out by the end of 1983.

Hospital cost containment. As a prerequisite for the adoption of national health insurance, the Carter Administration—in the late 1970s—offered cost containment as a way to control the rise in health-care costs. Under the Carter proposal, the Department of Health and Human Services was to limit increases in hospital revenues from all sources—Medicare, Medicaid, private insurance, and individuals—to a targeted rate. Cost increases in excess of this target would prompt more stringent limits on the allowable rate of increase in a hospital's revenues during the next year. The initial rate set for each hospital was to equal the over-all rate of inflation—which was below the rate of hospital-cost inflation. Congress ultimately rejected the Carter cost-containment proposal in the face of heavy lobbying pressure, fearing that it would dangerously squeeze hospital revenues.

The failure of these governmental controls has prompted the search for a market-oriented solution to the health-cost crisis.

application of the rules. Thus, the regulatory and administrative costs of monitoring the voucher program could be substantial over the long run.

While some reaction to the initial reports of the Administration's health-care strategy has lacked enthusiasm, most analysts continue to believe that the steep increase in health-care costs must be slowed if inflation and government health-care spending are to be brought under control. What appears to be needed is greater competition between insurance companies and providers of health care.

The health-insurance industry is made up of a government monopoly (Medicare-Medicaid), a dominant association of insurance firms (Blue Cross-Blue Shield plans), and many private insurers both small and large. Because of their size, Blue Cross-Blue Shield plans and the Medicare-Medicaid programs often are able to get price concessions from hospitals. As noted earlier, to recoup these discounts hospitals and doctors typically shift the costs to commercial insurers and individuals in the form of higher fees—in effect, a private-sector subsidy. This cost shifting has intensified in the past few years, mainly because federal budget cuts have forced hospitals to accept lower federal reimbursement rates. During 1981, it is estimated that the private sector's subsidy of the Medicare-Medicaid programs rose to $4.8 billion from $3.0 billion in 1980. Faced with this cost increase, private insurers are expected to raise premiums by 20% or even more in 1982.

Alternative course?

Corporate attention is beginning to focus on the inequities that exist in the current reimbursement system. The inequities appear to result from the bargaining power of government and Blue Cross-Blue Shield plans while other insurers are unable to negotiate low medical fees. Collectively, the private firms have the potential to hold fees down, but antitrust laws prevent them from forming groups to bargain over prices.

To rectify the inequities in the current reimbursement procedure, it would seem reasonable that Congress should take a new look at the application of antitrust laws in this area. Consideration needs to be given to changes which would allow smaller private insurers to bargain as groups with hospitals. If insurance groups negotiated discounted per-diem charges with specific hospitals, each insurer could inform its enrollees that it would pay 100% of the daily charges in those hospitals. A beneficiary using a hospital with a higher daily charge would have to pay the difference. Faced with higher out-of-pocket expenses, enrollees would have an incentive to patronize providers offering the discount or to exert pressure on the more expensive providers to reduce charges. In this competitive environment, high-priced hospitals and doctors would themselves have incentives to contain their prices in order to prevent a sharp fall-off in their utilization rates.

The inability to shift the costs resulting from discounts currently given to Medicare-Medicaid and Blue Cross-Blue Shield could force many hospitals to economize through more efficient use of their facilities. To be sure, increased competition could pose special problems for hospitals in urban areas (where the population consists of many elderly and poor) and among hospitals connected to universities (with large teaching and research staffs). The latter, saddled with high costs due to research and development expenses, play a vital role in furthering the advance of medical technology. And yet such hospitals simply could not compete with suburban hospitals where overhead is lower and where the financial base is generally larger. Thus, special help for urban and university-affiliated hospitals may well be required.

Still, as a broad principle, more competition —and less government regulation—is needed in the health-care area. But heightened competition needs to be widely based and must affect hospitals, doctors, insurers, employers, and beneficiaries alike. Therein lies the best hope that a competitive approach can hold down the rising cost of health care.

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Budget Troubles. *With no White House support for new taxes, the budget outlook is grim. Spending curbs aren't enough. Deficits threaten to crowd out private investment. The options open to Congress. Tough choices ahead.* *1*

Economic Outlook. *A new chill grips the economy—from the weather and from a Fed worried about money growth. Interest rates rising amidst recession. Outlook uncertain, but best guess: a moderate recovery starting in the spring.* *4*

Financial Markets. *Expect recurrent tension, but nothing like the extreme turbulence of 1981. A sector-by-sector analysis of credit supply and demand in 1982.* *10*

Economic Indicators *15*

Budget Deficits in Perspective

WHILE details won't be available until the fiscal 1983 budget is released on February 8, the broad thrust of Administration policy is now clear. President Reagan, reportedly rejecting recommendations from most of his advisers, has decided against seeking new taxes—despite the prospect of very large deficits for several years into the future.

The President's decision is unlikely to reassure financial markets, which remain apprehensive that Washington's economic policy mix is wrong—that too much reliance is being placed on restrictive monetary policy and too little on fiscal restraint. In early December, when Administration officials leaked news that massive amounts of red ink were a continuing prospect, bond markets became demoralized. Long-term interest rates, which had eased a bit in autumn, began to back up and have been distressingly high ever since.

Risks to the economy from the rapidly ballooning deficit are real. The deficit in the current fiscal year in all likelihood will approach $100 billion. With the recession's negative effects on revenue casting their shadow into 1983 and 1984, and with no new policy initiatives to bolster revenues, deficits could rise above $100 billion in those years. And the problem will intensify in 1985, when indexing of tax rates against inflation will sharply curtail the growth of government revenues.

The spotlight now shifts to Capitol Hill, where many lawmakers also are uneasy about the absence of a decisive program to lower the federal deficit. Senator Howard Baker, Majority Leader, has prédicted that members of Congress are likely to respond with efforts to raise taxes,

Factors Contributing to Budget Deterioration*

(Fiscal years; billions of dollars)

	1982	*1983*	*1984*
Administration's downward revision of economic growth estimates	38.2	52.2	52.9
Higher income security payments	11.0	13.0	11.0
Lower revenues	27.2	39.2	41.9
Administration's downward revision of inflation estimates	4.8	9.5	14.9
Revenues	7.9	15.4	24.8
Outlays	−3.1	−5.9	−9.9
Administration's upward revision of interest rate estimates**	23.5	26.0	34.1

*The Administration has not provided detailed estimates of the causes for deterioration in the budget outlook. The figures shown have been estimated by The Morgan Bank using revisions published by the Office of Management and Budget (OMB). The bank's estimates were developed by applying OMB budget "sensitivity measures" to the Administration's revisions of economic assumptions.

**These estimates also include some rise in financing costs due to higher deficits now forecast by the Administration for fiscal years 1982, 1983, and 1984.

cut social programs further, and reduce the rate of increase in defense spending.

What, specifically, would it take to move the budget in a credible way toward balance? Many options are open to Congress, both in spending programs and on the revenue side. Some of the key options are enumerated in this article. No attempt is made to weigh the political appeal of particular actions. The purpose rather is to highlight possibilities from which Congress could pick and choose.

Recession impact

The deterioration in the budget outlook between last spring and summer and the present time has been so massive that great confusion exists in many people's minds as to the precise causes. Economic developments have, of course, necessitated substantial revision of the Administration's working assumptions on the budget outlook. A less sanguine view now prevails over prospects for economic growth in 1982 and beyond. That view has forced a downward revision of revenue estimates and an upward revision of spending estimates, especially for unemployment compensation. Meanwhile, an improved inflation outlook—not only for 1982 but also for 1983 and 1984—has reduced expected expenditure growth and ultimately tax collections. Deterioration in the revenue outlook overwhelms the impact that lower inflation exerts on spending. The net effect, thus, is to add to the deficit.

A comparison of economic assumptions used by the Administration in its budget analysis last March with economic assumptions it is reported to be using now makes it possible to give rough estimates of the impact on the deficit of the changed prospects (accompanying table). The dimming prospects for economic growth is estimated to have added roughly $50 billion to the fiscal 1983 deficit and thus is the dominant contributor to the deteriorating budget outlook. Significantly, the table shows that prospective deficits are also substantially affected by the upward revision of interest-rate estimates.

Federal Borrowing Outlook

(Billions of dollars)

	1981		*1982 Projected*		*Fiscal*	*Fiscal*
	Q4	*Q1**	*Q2**	*Q3**	*1981*	*1982**
Receipts	147.2	139.5	182.6	162.4	602.6	631.7
Outlays	195.4	166.0	184.0	187.0	660.5	732.4
Deficit (−) on budget	−48.2	−26.5	−1.4	−24.6	−57.9	−100.7
Deficit (−) off budget	−3.6	−6.0	−5.2	−5.5	−21.0	−20.3
Total deficit (−) to be financed	−51.8	−32.5	−6.6	−30.1	−78.9	−121.0
Means of financing combined deficits:						
Net cash borrowed from public	35.7	37.7	11.1	31.8	79.3	116.3
Change in cash balance†	−6.7	−2.0	+2.0	+3.0	−2.3	−3.7
Other‡	+9.4	−7.2	−2.5	+1.3	−2.7	+1.0
End of period cash balance	12.0	10.0	12.0	15.0	18.7	15.0

*Estimated by The Morgan Bank.

†A negative implies a drawdown in the cash balance and hence represents a source of Treasury financing.

‡Includes float, deposit fund balances, and seigniorage.

In general, the deteriorating outlook for the economic environment, compared with last March, has been a substantially more important cause of deterioration in the budget outlook than have other influences, such as Congressional modification of President Reagan's tax and spending proposals.*

Financial market participants, for the most part, have understood that a substantial portion of the upward revision in the deficit since March has been beyond the Administration's control. Nevertheless, markets have grown increasingly anxious as they contemplate massive prospective Treasury offerings—rising to $116 billion in fiscal 1982 from $79 billion in fiscal 1981 (accompanying table). Compounding this problem have been high and volatile interest rates which have increased the risk and cost of carrying large portfolios of government securities for many dealers. Unless these market fears and anxieties are alleviated, an obvious risk exists that interest rates will continue high, thwarting a rejuvenation of economic performance.

What to do

Tampering with the main body of income-tax reductions enacted last year is not a promising avenue of remedy. Those tax cuts were

(Continued on page 6)

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*Press reports indicate the changed assumptions of the Administration. Whereas last March it was projecting that "real" GNP would grow by 4.2% in calendar 1982, the assumption now is for virtually no growth. For 1983 and 1984 the changes in growth-rate assumptions are much less significant but, of course, the prospective level of economic activity is considerably lower in those years than was previously forecast, reflective of 1982's lower starting base. For unemployment, the Administration is now assuming almost a 9% rate for 1982 trailing down to 8% in 1983 and 7% in 1984. A year ago the Administration expected a steady decline in unemployment—from 7.2% in 1982 to 6.4% in 1984. As to prices, the Administration is now assuming moderately less inflation in 1982 than it was expecting a year ago, but it has made downward revisions of a full percentage point for 1983 and 1984.

ECONOMY WATCH

THE economic outlook has become more uncertain in recent weeks. That is partly because January's bitter weather has been an obscuring influence and partly because the monetary environment has become less accommodating as the Federal Reserve has endeavored to counter rapid money growth. The new upward pressure on interest rates is particularly sobering against a backdrop of roughly 9% unemployment. This development has accentuated debate over the wisdom of rigid adherence to monetary-growth targets in the very short run. That debate is certain to sharpen further if recovery in fact is slow in developing.

Mixed signals

It is possible, of course, that the current situation is a replay of the early summer of 1980, when an upturn in money growth correctly heralded the beginning of the economic recovery, even though most other data were still pointing down. Indeed, there are signs—ranging from declining initial claims for unemployment insurance and increased durable-goods orders to a January pick-up over December in auto sales despite bad weather and the uncertainties caused by the G.M.-U.A.W. contract talks—which suggest that the economy may be close to bottoming. But none of these data supports the notion that a decisive upturn in economic activity is under way, one which would generate demands for transactions balances on the order of the recent increases in the monetary aggregates.

Although money growth was a good guide to what was happening concurrently in the economy in 1980, it was in fact a very misleading indicator in 1981. As the adjoining table shows, both the narrow, transactions-based measure of money (M1) and the more broadly defined measure (M2) accelerated last year just as nominal GNP was decelerating, and vice versa.

Quarterly Growth Rates of Money and the Economy

	GNP	*M1*	*M2*
1981:1	19.2	4.9	8.4
:2	4.7	8.9	11.1
:3	11.4	0.4	7.4
:4	2.7	5.7	11.1

NOTE: Quarter-over-prior-quarter percentage growth at seasonally adjusted annual rates.

Thus, even if the surge in M1 in early January is not reversed in coming weeks or not explained away as a consequence of inadequate seasonal-adjustment factors, the experience of last year suggests that it would be imprudent to interpret the sudden expansion in the aggregates as convincing evidence that a strong economic rebound is now under way. The Fed has already allowed the key Federal funds rate to move up substantially from its December lows. Surely, the resolute adherence to a stringent monetary policy which the Fed has shown over the last two years has earned it enough credibility to allow some leeway in the application of additional restraint, and it has moved fairly aggressively in absorbing reserves. A directional response of that kind was inevitable if the Fed was to maintain credibility. However, persistent further tightening in the absence of concrete signs of business strengthening would raise troublesome questions of whether the Fed was being excessively mechanistic in its monetarism.

The upswing in interest rates makes it especially difficult to gauge the end of the recession. But The Morgan Bank's best guess is that the recovery will get under way in the spring. The latest outlook in detail:

"Real" GNP is expected to decline further (at around a 2% rate) in the current quarter and a recovery at about the same rate is foreseen in the second quarter. As the table on this page shows, some slight acceleration in real GNP growth is expected for the second half of the year as a consequence of the reduction in personal tax rates and a moderate, though temporary, decline in interest rates before midyear. For the year as a whole, however, real GNP is expected to show no growth over 1981.

The main depressant on economic activity in the current quarter is probably a broad-based effort to reduce inventories, and that effort will likely carry over into the second quarter. In 1981's fourth quarter, real business inventories rose 0.6% which would not have been excessive except for the sluggishness of final sales. But with business final sales off 1.1% in real terms, the inventory-sales ratio rose to its highest level since the second quarter of 1980.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1981	*1982*			
	Q4	*Q1*	*Q2*	*Q3*	*Q4*
Real GNP	−5.2	−1.8	1.7	3.2	3.6
Real consumer spending	−1.8	3.0	2.7	3.1	4.1
Real business-capital outlays	−11.0	−5.2	−3.2	−0.3	1.4
GNP deflator	8.4	5.8	5.9	6.2	6.9
Consumer prices	7.9	6.0	6.3	7.5	7.3
Real disposable personal income	1.3	−0.8	1.3	10.3	4.1
Saving rate (%)	6.0	5.1	4.8	6.4	6.4
Housing starts (Millions)	0.9	0.9	1.0	1.1	1.2
Auto sales (Millions)	7.4	8.3	8.7	9.0	9.2
Unemployment rate (%)	8.4	9.1	9.2	9.2	9.1

NOTE: 1981 Q4 data are actual. Approximately one percentage point of the rise in the GNP deflator in the fourth quarters of both years reflects the timing of federal pay increases.

Business spending on plant and equipment also will probably provide less stimulus to the economy than seemed likely a month ago. The latest Commerce Department survey of expenditure plans, taken in November and December, showed a 0.5% decline in this year's real expenditures. The survey taken a month earlier had indicated some acceleration in investment spending in the first half of this year.

Housing activity, despite the uptick in starts in December, is almost certain to remain depressed because of the prospect for continuing high mortgage rates. Aside from booming defense outlays, government spending on goods and services, particularly at the state and local level, will remain a drag on economic activity. Consumer spending, which continues to benefit from higher transfer payments and reduced taxes, should be a sustaining force.

Amidst all the gloom, there is one bright spot: In the three months ended December, both the Consumer Price Index and the Producer Price Index for Finished Goods averaged less than a 5½% annual rate of increase. The CPI benefited from the weakness in home prices and a decline in mortgage rates (probably a transitory development), but even excluding the more volatile components—energy, food, home prices and financing costs—the remainder of the index slowed to a 6.9% annual rate from the 10.2% average of the previous three months.

To be sure, less inflation is a welcome trend. But there is still a way to go. The current rate of inflation, though well below its peak, is considerably higher than the 3.2% annual rate (for the CPI) in the second quarter of 1976, its low point following the 1975 recession.

neither a mistake nor something that should be reconsidered. They were needed to offset the depressing effects of high marginal tax rates on the productive sectors of the U.S. economy.

Over the long run, the tax incentives should encourage increased capital formation, productivity, and economic growth. This growth in nominal incomes and the resulting revenue feedbacks should help considerably to solve the problem of the federal deficit in the long run. Accepting the wisdom of the tax cut and the forecast of revenue feedback, however, does not imply that these supply-side benefits of the tax cut will come smoothly and quickly. This is because the exact magnitudes of the saving and investment responses are not known with any degree of precision. Rather than waiting for some uncertain supply-side outcome, there is a need to face up now to the short-run deficit problem.

Expenditure restraint

A remedial program, inescapably, will require further spending cuts—a need stressed by President Reagan in his State of the Union address on January 26. While details have yet to be provided, he indicated that he will recommend cuts of some $63 billion over the next four years in so-called entitlement programs. This initiative is encouraging since it has been clear right along that a substantial slowing of entitlements spending is critical to basic improvement in the budget situation.

Social Security. The biggest potential savings in the entitlement area are in Social Security, and, whatever the President now proposes, Congress ought to reconsider the President's July 1981 recommendations for addressing the financial crisis in the Social Security system. The proposals to relate disability benefits more closely to a person's work history and medical condition and to encourage workers to stay on the job until 65 are reasonable and would have little or no impact on current retirees. These changes—combined—would reduce spending by $2 billion over the 1983-84 period. Another way to restrain benefit payments would be to reduce the amount of inflation protection afforded by cost-of-living escalators. If a limit of 85% were put on escalator coverage for Social Security beneficiaries, such protection would be roughly similar to escalators in private wage contracts. Providing 85% inflation protection for Social Security recipients could yield an estimated $40 billion in saving over the next five years.

Defense. Even though significant increases in military expenditures are needed to rebuild the nation's military might, the defense budget cannot remain immune from the search for increased efficiency. The Defense Department, for example, could be required to use more than one firm to manufacture standardized weapons—e.g., missiles—that are bought in large quantities. In addition, the use of multiyear contracts for selected weapons systems could be expanded in order to reduce any uncertainty facing the manufacturer about future sales and to encourage long-run investments and more economical means of production. If these changes resulted in a 5% reduction in costs of procurement and research and development, it is estimated that the Defense Department could save about $16 billion over the next five years.

Spotlight on new taxes

So large are the threatened deficits that spending cuts by themselves cannot be expected to solve the budget problem. The gravity of the fiscal outlook, thus, forces consideration of additional taxes. Repugnant as that may be against the background of a need to reduce the over-all tax burden, some rise in taxes seems inevitable. Any such increases should, of course, be made effective in 1983—to avoid interfering with the recovery—and any tax hikes should carry "sunset" provisions so they will end after the near-term budget crisis is overcome.

Which taxes should be raised? A long list of possibilities exists from which Congress can select. One candidate that has been put forth would yield Treasury revenues through natural gas decontrol. Assuming decontrol on January 1, 1983, and assuming a "windfall profits" tax, the tax take could reach $15 billion to $20 billion annually.*

Special tax deductions and exemptions for certain groups and businesses—"tax expenditures" in budget jargon—will probably need new scrutiny. If all of these special tax breaks were to be terminated—an unlikely prospect, to say the least—Treasury revenues in fiscal 1983 would rise by some $300 billion. The table on page 8 highlights some of the major items. All have supporters who attest to their value and need. But, given today's fiscal straits, perhaps such special breaks are more questionable than in the past. To ease the impact, changes could be phased in over several years.

The tax deductibility, for instance, of both interest on consumer loans and state and local sales taxes ought to be reviewed by Congress to see if any consensus can be reached on the amount of tax breaks given to individuals. The total tax break from these deductions, which promote consumption and discourage saving, will amount to about $29 billion in 1982. Some limitation on deductible amounts could yield substantial revenues to the Treasury. Another special tax allowance worth considering is the deductibility of mortgage interest, which at present runs as much as $25 billion per year. Such deductions were an important part of the early post-World-War-II policies to stimulate the production of much-needed housing. With the current necessity for enlarged spending on new plant and equipment to boost productivity, it is questionable whether large subsidies for housing should be continued. Placing a ceiling on mortgage-interest deductibility of, say, $10,000 a year (to avoid a squeeze on middle income homeowners) could save the Treasury almost $5 billion over the next five years. Such a change would bring U.S. tax procedures closer to those in Europe where many countries place limits on the deductibility of an individual's interest expense.

Exemption of the interest earned on industrial development bonds provides another illustration of something that ought to be reconsidered. In the past, these issues have been used to finance a wide range of facilities, including manufacturing plants, fast food franchises, and country clubs. The widespread use of these instruments has raised the question of the circumstances under which the federal government should incur revenue losses—particularly of the kind that it cannot supervise or control—to subsidize the borrowing costs of the private sector.

Entirely new tax?

While the modification of special tax exclusions for individuals and business clearly would be a big help, elimination of the budget gap may require entirely new revenue sources. Some form of consumption tax should get major con-

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*Realistically, full decontrol stands no chance of taking effect as early as January 1983. Some speed-up (relative to the present schedule of decontrol) is the most that can be expected. Under present law the price of about half of all natural gas production would be decontrolled, but not before 1985.

"Tax Expenditures": Some Examples Affecting Individuals and Corporations

(Fiscal years; billions of dollars)

	Revenue loss 1982	1983	1984
Individuals			
Exclusion of Social Security benefits from taxation	12.8	15.0	17.5
Deductibility of mortgage interest on owner-occupied homes	25.3	31.1	38.0
Deductibility of property taxes on owner-occupied homes	10.7	12.7	15.2
Exclusion of interest on state and local housing bonds	.6	.7	.9
Deferral of capital gains on home sales	1.2	1.3	1.5
Deductibility of interest on consumer credit	6.0	7.1	8.0
Capital gains (other than agricultural, timber, iron ore, and coal)	19.0	21.1	23.4
Exclusion of employer contributions for medical-insurance premiums	16.6	19.5	22.9
Exclusion of interest on state and local debt	2.2	2.4	2.6
Deductibility of nonbusiness state and local sales taxes	23.1	28.1	33.7
Deductibility of medical expenses	4.1	4.7	5.3
Deduction for two-earner married couples	.4	4.4	9.1
Individual retirement savings	.2	1.3	1.8
Corporations			
Deferral of income of domestic international sales corporations	1.6	1.7	1.8
Expensing oil and gas exploration costs	1.9	2.2	2.6
Corporate surtax exemption	7.6	8.5	9.5
Exclusion of interest on state and local housing bonds	.7	.9	1.0
Exclusion of interest on state and local debt	4.3	4.9	5.3
Exclusion of interest on state and local industrial development bonds	1.2	1.6	1.9

NOTE: Tax expenditures are revenues that the Treasury does not collect from individuals and corporations that would have been collected except for special provisions in the tax code.

SOURCE: Congressional Budget Office, September 1981.

sideration by Congress. A low-rate sales tax which exempted food and other essentials so as to avoid regressivity not only would be a powerful revenue raiser but also would be entirely consistent with the rationale underlying last year's focus on tax incentives for saving and investment.

A number of recent studies have shown that the substitution of a consumption tax for an income tax would increase the level of saving in the economy. This is because the income tax reduces the after-tax rate of return from saving and thus drives a wedge between the reward for postponing consumption and the market rate of interest. As a result, present consumption is encouraged and saving is discouraged. The substitution of a consumption tax for an income tax, by reducing the tax on the return from capital, would tend to encourage aggregate saving.

A 2% federal consumption tax—which would exclude food and clothing, housing, and medical expenses—could raise as much as $15 billion in 1983. To be sure, the imposition of a sales tax would have the undesirable effect of raising the rate of inflation. But like the decontrol of oil prices, such an increase would be a one-time shock that would temporarily raise the inflation rate by about a percentage point.

These illustrations show that many tax and spending options are available to meet the budget challenge. Congressional election years traditionally have made lawmakers wary of taking tough actions, and the task of developing a credible program of deficit reduction is certainly rendered more difficult by the fact that revenue enlargement, if achieved, will have to come without the benefit of Administration leadership. Optimism is certainly not warranted as of now. But the hope must be that perception will develop that enormous risks to economic performance are involved in not acting aggressively to work deficits down—particularly in the context of a continuing clash between loose fiscal policy and a restrictive monetary policy.

Financial Markets in 1982

MASSIVE federal borrowing and the Federal Reserve's restrictive policy stance promise recurrent tension in financial markets this year. However, with the economy likely to continue sluggish for a few more months (box on page 4), it seems probable that the recent run-up of interest rates will reverse itself. And even after that, the modest economic turnaround now in prospect for the second half of this year—only half to two thirds as strong as the normal cyclical recovery—seems likely to curb the private sector's demand for credit, limiting the extent to which interest rates move upward in the latter part of 1982. It is extremely doubtful that interest rates will climb anywhere near the stratospheric peaks they reached in turbulent 1981.

The Morgan Bank's estimates of 1982 credit flows, shown in the tables on pages 11 and 13, suggest that net credit extension in the economy will rise by only 6% or so, compared with last year's gain of nearly 15%. While a $29-billion rise is expected in 1982, that rise will be due mainly to enlarged federal borrowing. Overall, borrowing outside the federal sector is expected to decline by $5 billion in 1982.

Federal borrowing. The recession and persistently high interest rates have dealt harshly with the Reagan Administration's plans for balancing the budget. The federal government's "on-budget" deficit is likely to rise by $14.5 billion this year, to $87 billion in calendar 1982 from $72.5 billion in 1981.*

On the brighter side, the growth of so-called "off-budget" federal outlays—three quarters of which are spent by the Rural Electrification and Farmers Home Administrations—seems to have been stemmed. Off-budget outlays, virtually all of which are financed through issues of Treasury debt, rose from $10.4 billion in 1977 to an estimated $22.4 billion in 1981. They are expected to equal some $20 billion this calendar year.

Total Treasury borrowing, after taking into account changes in miscellaneous financial factors expected to add a further $8 billion to the government's credit needs, is anticipated to run to about $115 billion in 1982, a rise of $27 billion (31%) from last year. On top of that, federally sponsored agencies will borrow another $50 billion in 1982—mainly for support of housing and agriculture—up from an estimated $43 billion in 1981.

Corporate financing. Some moderation in corporate financing requirements is probable in 1982, mainly because companies should require much less credit to finance inventory accumulation. Business, which got stuck with substantial unwanted inventories when sales faltered last year, now appears to be clearing some of the excess from its shelves. Moreover, when that liquidation process has run its course—probably not until late spring—and when the economy is expanding again, business is likely to keep a tight lid on inventory build-ups. Thus, in The Morgan Bank's economic forecast, business is projected to spend only $1 billion for inventory additions in 1982, down from $18.2 billion in 1981.

A very moderate 1982 increase in plant-and-equipment outlays will also tend to hold down business financing requirements. Three years of sub-par economic performance have left indus-

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*The expected rise in the federal deficit between calendar 1981 and 1982 would be some $24 billion larger, but for the fact that January 1982 Social Security benefits were paid on December 31, 1981. Although such payments normally are made on the third of each month, the schedule is advanced when that is not a business day.

The Demand for Credit

(Billions of dollars)

	1976	*1977*	*1978*	*1979*	*1980*	*1981**	*1982**
Federal government issues	69.1	57.6	55.1	38.8	79.8	88.0	115.0
Federal agency issues	15.5	22.3	35.3	47.0	42.5	43.0	50.0
State and local government issues	15.7	21.9	26.1	21.8	26.9	28.0	25.0
Corporate and foreign bonds and notes	41.2	36.1	31.8	32.8	38.4	23.0	35.0
Other business credit	23.7	58.9	86.9	105.9	59.0	110.0	80.0
Mortgages	87.2	132.3	148.3	155.9	121.1	103.0	105.0
Consumer credit	25.4	40.2	47.6	46.3	2.3	26.0	35.0
All other credit	15.9	18.6	41.8	28.9	44.1	55.0	60.0
Total credit demand	294.0	387.9	472.9	477.3	414.5	476.0	505.0

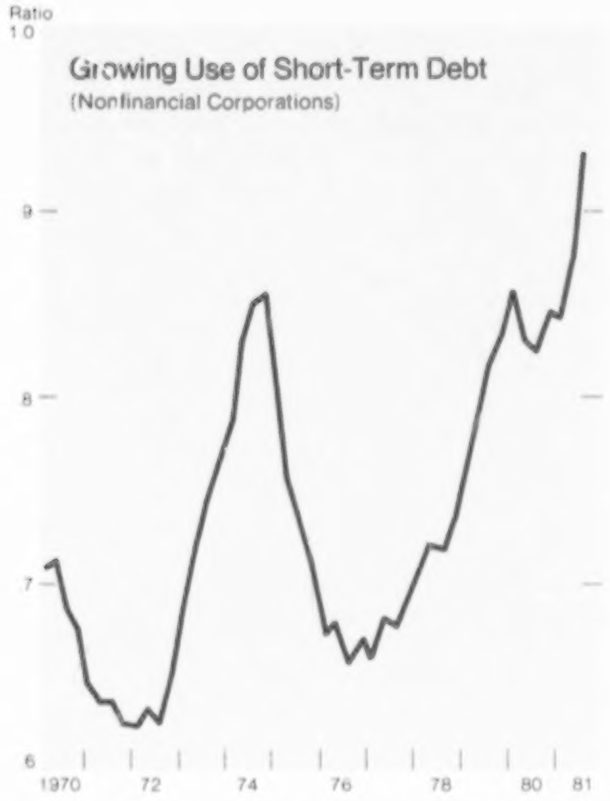
*Estimated. Due to rounding, components may not add to totals.

try with plenty of unused capacity. For the time being, despite the incentives for investment included in last year's tax bill, excess capacity is likely to combine with the high cost of funds to put a damper on business-investment outlays. Indeed, in The Morgan Bank's forecast, "real" business capital outlays are projected to decline by 3.3% in 1982—with actual, current-dollar outlays rising only 3.6%. Moreover, the corporate sector's internally generated cash flow, helped by a reduction in corporate tax liabilities, is likely to keep pace with this increase in capital outlays.

While the expected moderation in corporate financing requirements may be helpful in avoiding an outright collision in 1982 between federal and corporate debt managers, it would be wrong to assume that all will go smoothly. The corporate sector has a pressing need to issue bonds—a need that was aggravated by its heavy reliance upon short-term financing again in 1981, when it was hoped that companies might finally have gained an opportunity to lengthen debt maturities and reliquefy their balance sheets. Instead, corporate reliance upon short-term debt was pushed in 1981 to an all-time high (chart at top of page 12).

It is ironic that when corporations last were able to restructure their balance sheets by heavy issues of long-term bonds—in 1975-76—Treasury financing requirements were setting new records, thanks to the aftereffects of the 1974-75 recession. However, companies needed very little new money back then, having scaled back their outlays sharply in response to the recession. Thus, declining corporate financing did a lot to make room for Treasury borrowings. This year, while corporate financing requirements are expected to moderate slightly, the extent of the reduction will be far smaller in relation to federal financing needs than in 1975 (chart at bottom of page 12).

A further limitation on corporate restructuring possibilities now, especially in view of the bloated federal deficit, is the reluctance of traditional long-term investors such as pension funds and insurance companies to acquire long-term bonds. But with the inflation rate likely to be down sharply in 1982, even if investors remain wary of long-term issues, they may be-

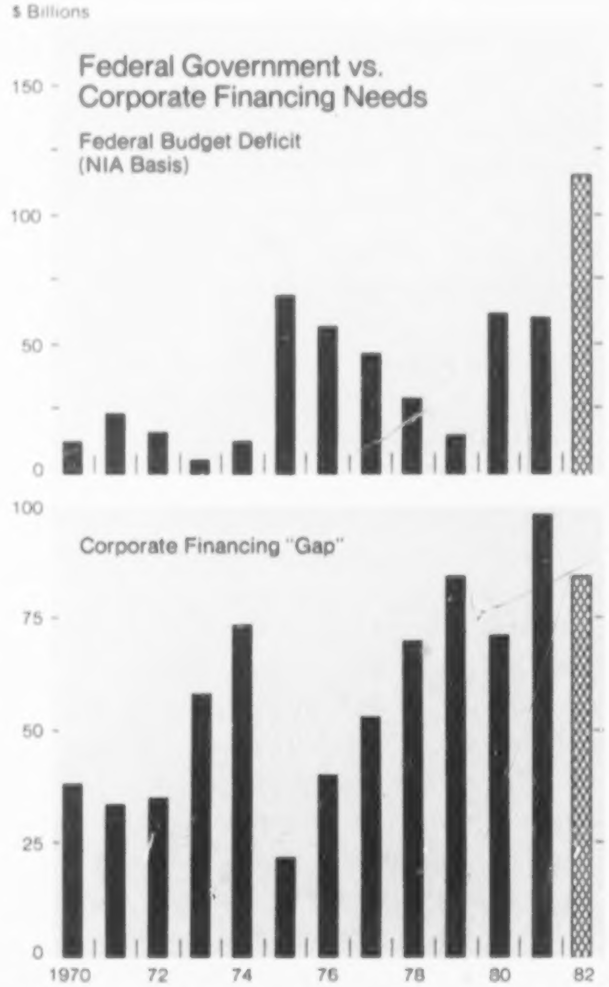

Growing Use of Short-Term Debt
(Nonfinancial Corporations)

NOTE: Plottings represent amount of bank loans, commercial paper, and bankers acceptances outstanding for every dollar of nonfinancial corporate bond liabilities.

come more willing to acquire medium-term bonds with maturities of five to seven years. There is, therefore, a basis for expecting that the net issuance of corporate bonds and notes will increase this year to something like $35 billion, or $12 billion more than in 1981.

That issuing pace would unfortunately not produce much improvement in corporate balance sheets. Companies are still likely to seek another $80 billion of short-term money (shown in the table on page 11 as "other business credit" —bank and finance company loans to business, commercial paper and bankers' acceptance financing, and net trade credit), more than twice as much as the amount which business is expected to raise in the bond market in 1982.

Other borrowers. Other users of credit are not likely, in the aggregate, to demand appreciably more credit in 1982 than they did last year. For state and local governments—squeezed both by an eroding revenue base and an inhospitable market for tax-exempt securities*—net borrowing in 1982 is expected to be slightly lower than in 1981. Consumer credit, which increased far more rapidly in 1981 than in 1980 (when credit controls were in effect for part of the year), is expected to change less sharply in 1982. Con-


Federal Government vs. Corporate Financing Needs

Federal Budget Deficit
(NIA Basis)

Corporate Financing "Gap"

NOTE: Plottings in lower panel represent business fixed investment plus inventory accumulation, less retained corporate cash flow. Plotting for 1981 in lower panel is estimated.

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*"Fiscal Stress for States and Localities," *The Morgan Guaranty Survey*, November 1981.

Where the Money Might Come From

(Billions of dollars)

	1976	*1977*	*1978*	*1979*	*1980*	*1981**	*1982**
Commercial banks	59.6	87.6	128.7	121.1	99.7	115.0	125.0
Savings institutions	70.5	82.0	73.5	55.9	58.4	32.0	40.0
Life insurance and pension funds	37.2	50.3	58.4	53.0	64.3	62.0	65.0
Money-market mutual funds	0.6	−0.1	3.2	19.8	14.9	66.0	55.0
Other financial institutions	23.5	41.0	38.5	42.7	33.0	43.0	50.0
Nonfinancial corporations	13.4	6.7	11.9	17.1	7.4	16.0	15.0
Governments, including Federal Reserve	44.3	47.6	61.6	87.5	88.8	83.0	90.0
Foreign investors	15.2	39.6	38.0	−6.0	20.0	8.0	5.0
Individuals and others	29.7	33.1	59.0	86.3	28.0	51.0	60.0
Total credit supply	294.0	387.9	472.9	477.3	414.5	476.0	505.0

*Estimated. Due to rounding, components may not add to totals.

sumer borrowing is expected to total $35 billion this year, up from $26 billion in 1981.

Another weak spot for credit demand in 1982 is likely to be mortgage activity. Because of continued high interest rates, any pick-up of housing starts is likely to occur too late and be too small to give a boost to 1982 mortgage credit extensions. Similarly, the sale of existing homes is likely to continue weak, with about the only impetus for increased activity coming from anxious sellers, who may become more willing to provide financing to prospective buyers. For 1982, net new mortgage formation is expected to equal $105 billion, essentially unchanged from last year's level.

Supply vs. demand

Accommodating the modestly enlarged demand for credit implied by the foregoing numbers would not on its face appear particularly difficult. Owing in part to the 1981 tax bill, the personal saving rate is likely to rise from 5.3% in 1981 to 5.7% this year. The dollar amount of gross personal saving is likely to be some $30 billion over last year's figure, an amount which closely coincides with the amount of additional credit demand that is expected in the economy at large.*

In this context, commercial banks are likely to extend some $125 billion of net new credit in 1982, up modestly from 1981. This figure would be significantly larger, were it not for the likelihood that the public will continue placing large amounts in money-market mutual funds. The money funds grew by some $109 billion in 1981, and only about one fourth of that was invested in bank certificates of deposit and hence channeled through commercial banks into the credit markets. Indeed, the money funds, which acquired some $66 billion of U.S. government securities, bankers' acceptances, and commercial paper in 1981, are expected to acquire $55 billion of such instruments this year.

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*It is by no means necessary that any year's addition to personal saving be equal to incremental credit demand. Indeed, gross personal saving in 1981, at $230 billion, was less than half as large as last year's total credit flows of $476 billion.

The amount of credit flowing through thrift institutions will also continue to be affected by money-fund growth in 1982. The thrifts accounted for only $32 billion of credit flows last year, down sharply from the prior year's $58.4 billion, and down even more from the peak of $82 billion in 1977—when 21% of all credit supplied in U.S. markets came from the thrifts. For the current year, with much less turbulence in financial markets, it is expected that the thrifts will provide a net of $40 billion to the credit markets, or 8% of credit flows.

The Fed connection

Ultimately, of course, the key to the way that credit supply comes into balance with credit demand will be the monetary-policy actions taken by the Federal Reserve. The Fed, whose own securities purchases are but a small fraction of credit-market flows—usually 1%-2% of net credit extended—clearly has a disproportionate impact on the amount of credit actually forthcoming from other sources. What the Fed will do in 1982, of course, will hinge mainly on the behavior of the monetary aggregates.

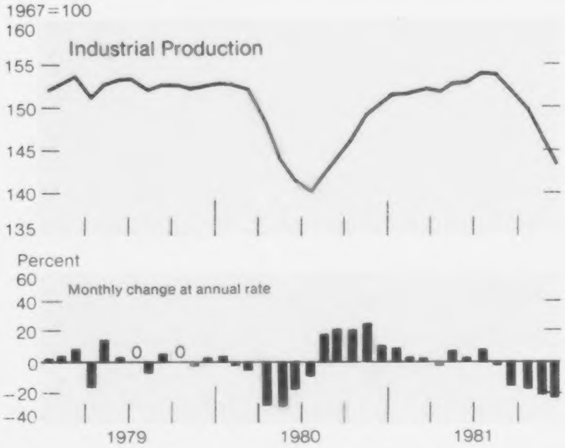
The Federal Reserve's 1982 targets, as tentatively set last summer, call for growth of the M1 monetary aggregate (currency plus transactions deposits) of 2½% to 5½% from last year's final quarter to the fourth quarter of 1982. The Morgan Bank's economic forecast—which is the basis for the credit-flow estimates presented above—looks for growth of nominal GNP of 7.9% over that same interval. The question is, what level of interest rates will it take to hold M1 growth to 5½% or less with that kind of GNP rise?

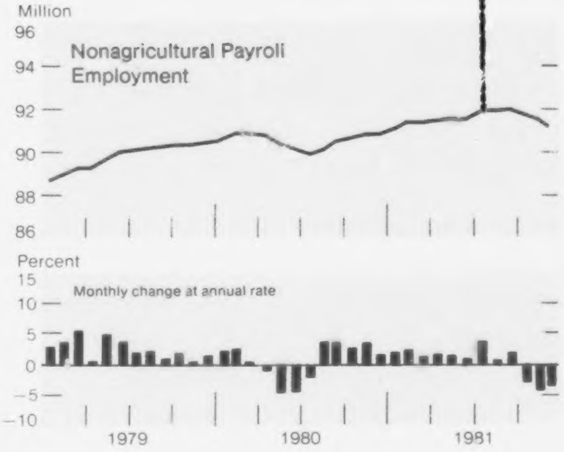
A good chance exists that only moderate upward pressure on interest rates later in the year will be needed to constrain the public's appetite for holding money balances. Over the last twenty years, the "velocity" (or rate of turnover) of the M1 aggregate has trended upward by about 3% a year. That is, GNP has risen by about 3% more than the M1 aggregate. In the past, moreover, when the economy has moved out of recession, velocity often has increased more rapidly. Thus, for 1982, it would seem safe to anticipate that M1 velocity will rise by at least the amount that is needed to reconcile 7.9% GNP growth with a 5½% upper limit on the rise of M1.

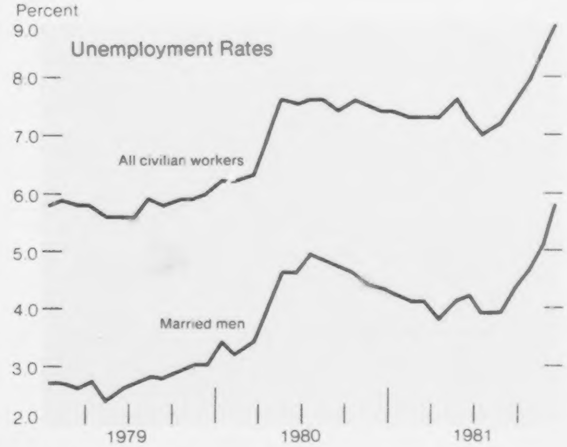
With nominal GNP likely to rise at a more rapid rate in 1982's second half than in the first —10.1% in the second half, only 5.8% in the first—some increase in monetary restraint is probable in the second half of this year. Moreover, the aggregates are on the high side of their targets even now. But the Fed has moved again toward restraint, and that restraint is coming on top of an already weak economy, so there is a reasonable basis for expecting that the recent surge in the aggregates will correct itself. If so, that should set the stage for some relief from the stressful credit-market conditions of late, before rates again head higher.

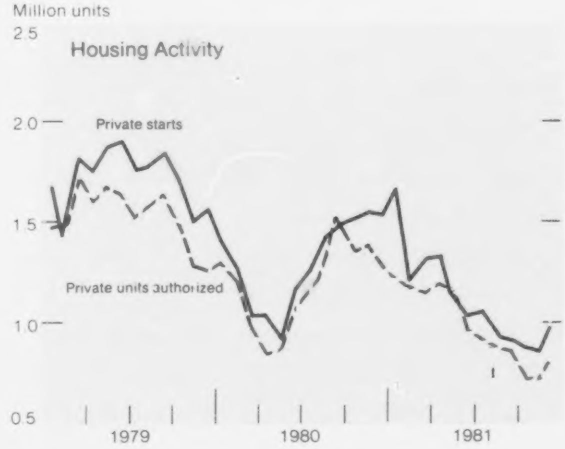
As for 1983, the prospects of avoiding another escalation in interest rates are not as bright—at least not without meaningful progress on the federal deficit. Without such progress, and unless the economy again stalls out after just two or three quarters of growth, or the inflation rate takes an unexpected nosedive below its expected range of 6% to 7%, 1982 is likely to be a prelude to tougher conditions ahead in financial markets.

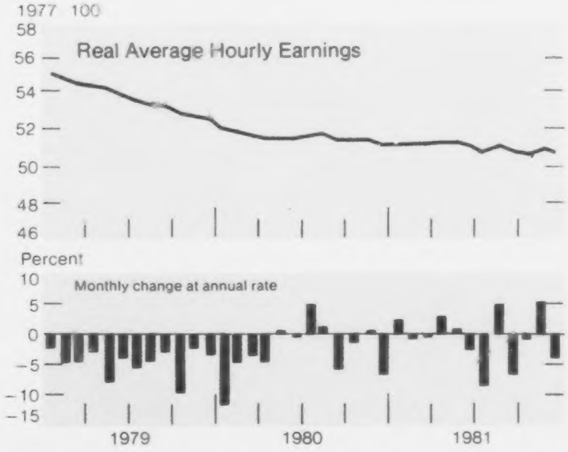
ECONOMIC INDICATORS

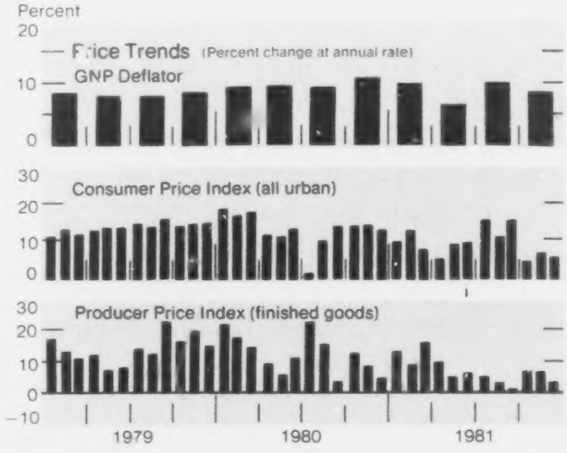












NOTE: All data are seasonally adjusted. Average hourly earnings are adjusted for overtime hours in manufacturing and for interindustry employment shifts.

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Economic Outlook. *Prospects are brightening for recovery in spring or early summer. Good inflation news, reinforced by slumping oil prices, lessens pressures for Fed restraint. Latest quarterly projections for 1982.* 1

Eurobond Boom. *The lure of cheaper credit is attracting U. S. firms to the Eurobond market. But there are drawbacks, as well. Report on a burgeoning capital market.* 4

Natural Gas. *Decontrol is out—for now. But the issue will be back. President Reagan wants decontrol. So do many in Congress. Ending the maze of regulations could cut oil imports by 10%, bring other benefits. A case history of excessive regulation and its damage.* 7

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Economy Watch: A Brightening Horizon

CLEARLY, it will be a while before the implications of the recent dramatic slide in oil prices can be fully sorted out. A lot will depend on whether members of OPEC are able to work together effectively in fashioning a responsive strategy. The prime objective of their scheduled meeting on March 19 presumably will be to devise shared production cuts. The chances, however, that OPEC can exert major leverage in oil markets in the short run do not seem high. That's because the sharp contraction of oil consumption in industrial countries during the past three years—due to sluggish economic growth and continuing conservation efforts—has left demand for OPEC oil dramatically below the production levels viewed as desirable by individual OPEC members.

In terms of the short-run outlook for the U. S. economy, slipping prices for petroleum and petroleum products have decidedly positive implications, both psychological and real. Oil-product prices in the U. S. are now falling sharply in response to crude-price declines. At retail, gasoline and heating-oil prices are likely to fall at least ten cents per gallon by midyear from their levels at the start of this year. The emergence of oil-price weakness at a time when general price indexes are already showing significant improvement renders the effect especially pronounced. The annual rate of increase in both the consumer price index and the producer price index has slowed to just over 5% in the past three months—a pace that it is now reasonable to assume will be maintained, or improved on, at least through midyear (table on page 2). The improvement in price trends will help to lower inflation expectations and, in the case of lower energy prices, will enlarge the potential of consumers to buy nonenergy goods and services.

Buoyed by the change for the better in inflation trends–and also by an encouraging downdrift in the money aggregates during February–investors have been showing increased willingness to acquire debt securities. Bond markets, while continuing to be erratic on a day-to-day basis, have shown considerable improvement in tone. Between early February and early March, for example, the yield on long-term government bonds fell by more than a percentage point, with the corporate bond market showing similar strength. That is encouraging, of course, since a declining trend in long-term interest rates is essential if housing and business investment are to contribute significantly to economic growth this year and next.

Perking up

Meanwhile, the latest economic indicators raise hopes that the worst of the recession is over and that a recovery could get under way in spring or early summer. Importantly, February labor-market data support the view that the particularly weak performance of many key economic indicators in January was in large part a weather phenomenon. The length of the work week snapped back impressively in February, and employment trends–both in the aggregate and by industry–also were indicative of stabilizing tendencies in the broad economy. Nonfarm payroll employment, which registered a monthly average decline of more than 300,000 between September and December, was down less than 90,000 on average in January and February.

Perhaps most significant for the near-term outlook is the changing pattern of business inventories. Inventory shifts have accounted for the bulk of the drop in GNP since last July. Stock growth started tapering off in the late autumn and a phase of large-size liquidation began at the year's end. In January domestic automobile inventory, for example, was cut 10% and further sharp reductions were made in February. Total business inventories will probably be reduced 3% or more in real terms at an annual rate in the current quarter–the sharpest reduction since the 1975 recession. With a good chance that most of the adjustment in stocks will be over by early spring, the inventory drag on GNP growth should diminish noticeably in the second quarter. The sheer mechanics of the inventory cycle, thus, strongly support the view that general recovery ought to get under way reasonably soon.

Consumer Price Index

(Percent change at annual rate)

		Projected		
	1981 Dec. to Dec.	*1982 Dec. to Dec.*	*1982 1st Half*	*1982 2nd Half*
Total	8.9	4.9	3.7	6.0
Food	4.3	8	8	8
Energy	11.9	−0.6	−7	6
Oil	10.7	−7	−18	3
Gas and electricity	14.7	13	14	12
House purchase and finance	10.4	0	−2	2
Mortgage rate	18.5	−2	−4	0
House price	1.2	1	0	2
Other	9.2	6.7	6.5	7

Against that background, The Morgan Bank now projects that second-quarter "real" GNP will rise at an annual rate of just under 3% (table on page 3). That rise should get a sustaining lift from forces already programmed into the economy for midyear: the second stage of the income tax cut and a rise in Social Security payments—a $45 billion package.

Caution still indicated

Recent brightening in the outlook should by no means occasion unbounded optimism. Recovery seems destined to proceed at a slow pace as compared with the early stages of a normal recovery—about a 3% annual rate of growth is in prospect for real GNP during the initial quarters of expansion, in contrast to the usual 5% or 6% pace.

The general snugness of the Federal Reserve's M1 target is one reason for expecting subpar growth, since any tendency for economic activity to surge ahead strongly would be likely to increase the demand for money and credit, and that in turn could reintroduce upward interest-rate pressure. And caution about growth prospects is also indicated by the condition of the federal budget. For the moment, debt-market investors seem to have put their previous concern about budget trends pretty much to the side. However, budget concern rises and falls in rather mysterious ways. Such concern could easily rise again (as in the summer of 1981), triggered by evidence that dramatized Congressional inability to improve the deficit outlook materially for 1983 and 1984. In those circumstances, bond yields could either become resistant to further decline or actually begin to rise anew—with either development inimical to housing and investment activity. In short, the outlook is brightening, but it is still by no means worry-free.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1981	*1982*			
	Q4	*Q1*	*Q2*	*Q3*	*Q4*
Real GNP	−4.7	−3.5	2.9	3.1	3.0
Real consumer spending	−2.3	2.7	3.4	2.8	3.0
Real business-capital outlays	−5.3	0.0	−3.8	−0.2	0.7
GNP deflator	9.3	5.9	5.6	6.6	6.8
Consumer prices	7.8	4.0	4.2	5.4	6.8
Real disposable personal income	1.4	−1.3	1.6	9.3	2.2
Saving rate (%)	6.1	5.2	4.8	6.2	6.0
Housing starts (Millions)	0.9	0.9	1.0	1.2	1.2
Auto sales (Millions)	7.4	8.4	8.9	9.2	9.2
Unemployment rate (%)	8.4	8.8	9.1	9.2	9.2

NOTE: 1981 Q4 data are actual. Approximately one percentage point of the rise in the GNP deflator in the fourth quarters of both years reflects the timing of federal pay increases.

Eurobonds: Cheaper Credit for U.S. Companies?

WHILE the U. S. corporate bond market has been in the doldrums, the volume of dollar-denominated bonds issued by corporations and other entities in foreign markets has surged. Last year, some $26.8 billion of such dollar Eurobonds were sold abroad, an increase of $12.4 billion (63%) from 1980. As a result, dollar Eurobond volume in 1981 stood at an all-time high relative to the pace of corporate debt issues domestically (chart on page 5).

Although domestic companies normally have the corporate bond market in the U.S. mostly to themselves, the situation is considerably different abroad. In the Eurobond market, non-U. S. issuers—businesses, governments, and international organizations—usually account for three quarters or so of dollar issues. Still, last year, U. S. companies raised $6.1 billion through dollar Eurobond issues, compared with $3.8 billion in 1980.* This meant that Eurobonds represented 11% of the funds raised by U. S. business through dollar-denominated bonds last year, up from 6.4% in 1980.

This trend seems to have continued with a vengeance into early 1982. In the month of January, despite the meager volume of domestic debt issues by U. S. firms—only $1.2 billion, counting public issues and private placements —U. S. firms raised over $1.3 billion in the dollar Eurobond market, mostly through "deep-discount" issues.* In February, another month of extremely weak volume in the domestic bond market, U. S. companies issued more than $1 billion of dollar Eurobonds. Early in March, strikingly, American Telephone and Telegraph Company announced its intention to tap the Eurobond market for the first time.

A strong dollar

Behind the heavy volume of dollar Eurobond issues over the last year is an enlarged appetite among foreign investors for high-yielding, dollar-denominated securities—a development mirrored in the sizable net gain of the U. S. dollar in foreign exchange markets in the last year or so. Indeed, dollar-denominated bonds represented 85% of all Eurobond issues last year, up from 69% in 1980 and the largest share for dollar issues since 1967.

The eagerness of foreigners to acquire dollar securities meant that, at times in the last year, U. S. companies were able to issue Eurobonds at interest rates that were as much as 50 to 100 basis points below those in the domestic bond market. In theory, of course, arbitrage should quickly close such gaps—as borrowers rush in to issue Eurobonds at the lower rates. In practice, however, with U. S. bond market condi-

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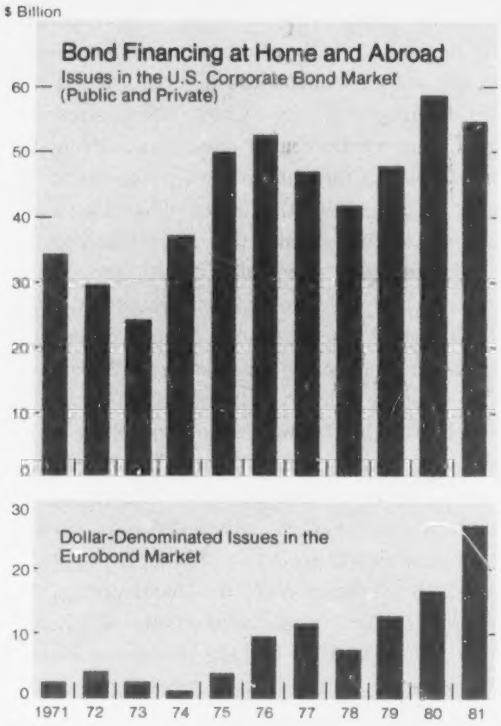
*U. S. companies generally issue Eurobonds through nonoperating, offshore financing subsidiaries. Borrowings by foreign *operating* subsidiaries of U. S. companies are excluded from the figures cited above. Also excluded are foreign-currency bond issues by U. S. companies. Such issues, which totaled some $665 million in 1981, are increasingly being used, together with foreign exchange transactions by U. S. companies, to "create" dollar financing. It is likely, moreover, that recent changes in the accounting rules governing foreign exchange translation gains and losses will spur the issuance of foreign-currency bonds by U. S. companies in the future.

*A deep-discount bond is one which carries a below-market or even zero coupon and is therefore sold at an initial price which is substantially below its par value. The return on such a bond is a combination of the coupon paid (if any) and appreciation from the discounted price. All bond-volume figures cited in this article include deep-discount securities at discounted value rather than par value. The importance of this distinction is illustrated by the fact that the par value of dollar-denominated Eurobonds issued by U. S. companies in January 1982 was nearly $4.7 billion, but the amount of money actually paid by investors for these issues (the discounted value) was just under $1.2 billion.



Bond Financing at Home and Abroad

Issues in the U.S. Corporate Bond Market (Public and Private)

Dollar-Denominated Issues in the Eurobond Market

NOTE: Bond volume in both panels includes issues by U.S. corporations and foreign entities. In 1981, domestic corporations accounted for 89% of issues in the U.S. bond market and 23% of dollar issues in the Eurobond market. All data on domestic bond issues cited in this article are, for 1977-present, from Morgan Stanley & Co., Money and the Economy. Data for earlier years are from Investment Dealers' Digest. All data on Eurobond issues are from a tabulation by The Morgan Bank.

tions often shifting rapidly, and Eurobond market participants dispersed all over the globe, there tends to be a lag in the response of the Eurobond market to changing interest rate levels in the U. S.

Differences in tax laws from country to country often contribute to such arbitraging delays. A key factor is that the interest earned by a foreigner on a U. S. corporate bond is in most cases subject to U. S. withholding tax—generally at a rate between 15% and 30%. Yet, there is virtually never any withholding tax when a foreigner buys a company's dollar-denominated Eurobond. As a consequence, some investors in Eurobond issues look at the U. S. market as unattractive even when U. S. rates are higher than those on Eurobonds, and this does not facilitate the arbitraging process.

This year, a further influence on the Eurobond market has been awareness of the tax advantages of deep-discount bonds. In some countries, and under some circumstances, appreciation is treated as a capital gain for tax purposes, and is either exempt from taxation entirely or else is taxed at highly favorable rates. As a consequence, many foreign investors have been willing to buy new issues of deep-discount Eurobonds at yields sometimes quite far below the yields that would have been required on such issues in the domestic U. S. market.

Until recently, Japanese investors have been particularly attracted to zero-coupon issues. In Japan, interest income is taxable but many capital gains are tax free. Earlier this month, however, the Japanese government made it clear that this tax exemption was not intended to apply to the appreciation on deep-discount bonds, and Japanese interest in these securities has consequently dried up.

One additional factor working in favor of Eurobond issues is the absence of the sort of time-consuming registration requirements which the Securities and Exchange Commission (SEC) traditionally has applied to domestic corporate bond issues. Companies can issue Eurobonds extremely rapidly, without any delay for registration, whenever there is a "window" for cheaper borrowing.

Euro limitations

This attraction relative to bond issuance in the U. S. market, however, may not last much longer, particularly for larger corporations. In recent years, the SEC has been permitting many such companies to use accelerated procedures for registration of their domestic bond issues, cutting down on the speed advantage of issuance in the Eurobond market. And late last month, the SEC approved a nine-month trial of new rules that would effectively eliminate the need for many major companies to issue a separate registration statement each time they wanted to issue securities. This could work in favor of U. S. issues in the future.

Moreover, there are important limitations on the usefulness of the Eurobond market to many U. S. issuers. First and foremost, Eurobonds have not consistently been a cheaper source of credit. On many occasions, particularly when bond rates have been falling in the U. S., the adjustment lag in Eurobond rates has tended to make U. S. issues the less costly alternative.

An additional problem for many U. S. issuers is that Eurobond maturities rarely go beyond ten years, much shorter than the maturity for which many U. S. companies prefer to issue bonds. Indeed, even though there has been a substantial shortening of U. S. bond maturities in the last several years, more than 40% of public-market bond issues in 1981 carried maturities longer than ten years. Still another disadvantage of Eurobond issues arises from the reluctance of many Eurobond investors to acquire the bonds of highly credit-worthy U. S. companies that are not well known abroad.

On balance, then, despite its remarkable growth and frequent attractiveness to many U. S. issuers, the Eurobond market is far from a panacea for corporate treasurers. While cost-saving opportunities undoubtedly will continue to be available from time to time, there is little basis for expecting foreign investors consistently to provide financing to U. S. corporations on terms more favorable than those that domestic investors will accept. A solution to the bond market's malaise—and the achievement of strengthened corporate balance sheets—will continue to depend on making investors, whether domestic or foreign, confident that the bonds they buy today will not later go "under water" because of yet another upward ratchet of the inflation rate.

Natural Gas Decontrol: Issues and Prospects

PRESIDENT Reagan's decision early this month not to ask Congress to speed up decontrol of natural-gas prices all but rules out action—at least until after the fall elections. Earlier this year it had appeared that prospects for reform of the Natural Gas Policy Act had improved. Impetus for action had come mainly from the potential that decontrol offers for boosting federal revenues—by as much as $10 billion annually—and thus reducing budget deficits. Despite that attraction, however, concern about voter reaction in an election year (40 million homes are heated with gas) proved overpowering.

Even so, the issue of decontrol is far from dead. President Reagan, who embraced deregulation during his campaign, stressed on March 1: "Natural gas decontrol remains an essential component of a sound energy policy." The President's *Economic Report*, released last month, estimated that resource waste and inefficiencies under existing gas controls will cost the U. S. economy $10 billion this year.

Getting the government out of the business of regulating natural-gas prices would yield many benefits. Among such benefits: An end to controls could reduce oil imports by 500,000 barrels a day—about 10% at current import levels. Moreover, a free market in gas would spur exploration for new sources of natural gas and eliminate a capricious and arbitrary program that has tangled the industry in a maze of regulation.

Natural gas regulation is more than a quarter of a century old. It is hard to find an industry that historically has labored under regulations that have done so much damage. By the mid 1970s, twenty years of gas prices held artificially low by price controls led to widespread shortages, shortened workweeks, and plant closings. Efforts to correct these problems led to passage of the Natural Gas Policy Act (NGPA) in 1978 (box on page 12). Although the Act undid some of the damage brought on by earlier regulatory efforts, it created new problems that need attention.

The NGPA is so complex that one major company has estimated that its gas executives spend a third of their time coping with the regulations. Price ceilings are set on approximately twenty different categories of production—depending, for example, on when the gas was found, the depth of the well, whether the gas was committed to interstate commerce before 1978, and whether the producer is a large or small company. For the most part, higher prices are allowed for relatively recent finds and low-yield wells, for gas never committed to interstate markets, and for small producers. Gas produced from wells deeper than 15,000 feet—about 3% of total gas output—has no price ceiling at all.

The major impact of the NGPA has been to hold the average price of gas substantially below free-market levels—reducing incentives to produce and to conserve gas. In addition, price controls have required the government to enact restrictions on use of gas in order to balance demand with available supply.

Although price controls have held down the average price of gas, they have had the paradoxical effect of boosting the price of the small portion of gas not subject to control. This is because, when the average price is below market levels, the demand for gas exceeds supplies. In this situation, pipelines will tend to compete for available supplies in an effort to satisfy their customers' demands, thereby driving up the price of uncontrolled gas. Controlled gas pro-

Gas Production and Price by NGPA Category

		Old gas		"Stripper"	High	
	New gas	*Interstate*	*Intrastate*	*(lower-yield wells)*	*cost*	*Total*
Production (trillions of cu. ft.)						
1978	1.48	8.69	6.57	.85	.09	19.12
1979	3.73	7.78	5.86	.86	.31	19.66
1980	6.13	6.96	5.22	.83	.66	19.35
1981	NA	NA	NA	NA	NA	19.60
Wellhead price (dollars per million BTUs)						
1978	1.50	0.70	1.15	0.80	1.50	0.94
1979	1.97	0.75	1.20	1.84	2.29	1.21
1980	2.21	0.89	1.26	2.08	4.14	1.55
1981	NA	NA	NA	NA	NA	1.83

NOTE: "New gas" covers gas whose price is subject to NGPA Sections 102 and 103. Figures shown for interstate and intrastate production include their respective portions of Section 106 gas.

SOURCE: Department of Energy. Production figures by category do not add to totals, since they are based on data sources different from those used by the Department of Energy to estimate total production. Category figures, however, do provide an accurate reading of the relative importance of different types of gas. Official production and price figures for the categories are not available for 1981. Official figures for production totals are available through November 1981 and for price totals through September 1981; data for balance of year are estimated by The Morgan Bank.

vides a cushion which permits decontrolled gas to sell at a premium related to how much controlled gas the buyer is able to mix with it. This is the basic reason why pipelines have been bidding for decontrolled gas (primarily from wells drilled to below 15,000 feet) at prices that have ranged up to $9 per million BTUs–more than four times the average gas price. It also explains why pipelines have been buying Canadian and Mexican gas at prices far above the average price of U.S. gas.

Even with price controls, the average price of gas at the wellhead has roughly doubled since 1978 (table above). This is partly because NGPA price ceilings escalate with inflation and partly because the share of production in the lower-priced NGPA categories has been declining. In addition, in the case of most new gas, there is an "escalation factor"–currently 4% per year–that may be added to the ceiling price.

The doubling in the average wellhead price of gas has led to some switching from gas to coal by electric utilities and large industrial users, and to significant cutbacks in gas consumption by other users. Nevertheless, gas consumption has remained approximately flat. What happened was that many oil users switched to gas–thus offsetting the decline in gas consumption per user. This was possible because earlier in the 1970s many electric utilities and large industrial users had been forced to switch from gas to oil by government use restrictions and by gas utility curtailments (table on page 9). Since 1978, however, this process has been partially reversed as gas supplies improved and as demand declined because of rapid price increases. An easing of government use restrictions and a decline in curtailments have allowed many electric utilities and industrial users to switch back to gas. In addition, many residential and commercial customers switched to gas for the first time because its price—while rising rapidly—was still substantially below the soaring price of oil.

Looking ahead

The NGPA provides for controls to end January 1, 1985 on the prices of roughly 60% of total U.S. gas production—mostly gas from new wells and a large portion of older intrastate output. A further portion of production—largely the remaining output from new wells—is to be decontrolled in mid 1987. The rest—primarily production that had been committed to interstate commerce prior to 1978—will stay under ceilings indefinitely.

What will happen to the average price of gas under the NGPA, of course, will depend on a wide range of factors, particularly on the course of inflation and on the price of oil. In the near term, it is clear that gas prices will continue to rise rapidly, as the NGPA ceilings escalate and production shifts further toward the higher-priced categories. In addition, the Federal Energy Regulatory Commission (FERC) is likely to boost ceiling prices for certain gas categories where there is administrative flexibility under the NGPA. For example, FERC recently proposed higher prices for gas produced from wells drilled to between 10,000 and 15,000 feet or in water over 300 feet deep.

Over the longer term, the NGPA is unlikely to constrain the average price of gas significantly and, thus, the average is likely to depend on fundamental supply-demand forces. Even as early as 1985, when 40% of gas will still be under price ceilings, the average price of gas may well be as high as it would be in a free market. This is because, as is happening to the price of gas from deep wells, the price of uncontrolled gas will tend to be bid up as long as there is a cushion of controlled low-priced gas against which to average. With the price of 60% of gas decontrolled, it would not be difficult to

Oil and Gas Use by Sector

(Quadrillion BTUs)

	Residential and commercial			*Electric utilities*			*Industrial*			*All sectors*		
	Gas	*Oil*	*Total*	*Gas*	*Oil*	*Total*	*Gas*	*Oil*	*Total*	*Gas*	*Oil*	*Total*
1973	7.6	6.7	14.4	3.7	3.7	7.4	10.4	6.7	17.1	21.8	17.1	38.9
1978	7.6	6.3	13.9	3.3	3.8	7.1	8.5	7.8	16.4	19.5	17.9	37.4
1981	7.5	3.9	11.4	3.7	2.5	6.2	8.5	7.7	16.2	19.7	14.1	33.8
					Percent change							
1973-78	0	−7.0	−3.3	−12.0	3.9	−4.2	−17.8	17.3	−4.1	−10.6	4.8	−3.8
1978-81	−2.1	−37.6	−18.1	13.6	−34.8	−12.3	−0.6	−2.0	−1.3	1.2	−21.4	−9.6

SOURCE: Department of Energy. Data for November and December 1981 estimated by The Morgan Bank. Percent changes derived from unrounded numbers.

THE INDUSTRY IN BRIEF

THE natural-gas industry is made up of producers, pipeline companies, and distributors. Fully half of all gas output in the U.S. today is produced by about 25 large firms—most of them integrated petroleum companies. The rest is produced by some 6,000 small firms which, like the major oil companies, drill for both oil and gas.

Pipeline or transmission companies number about 35. Some one third of these firms transport gas within a producing state; the remainder form the interstate system. Pipeline companies purchase gas, usually under long-term contract, from producers and transport it to major metropolitan areas. There they sell it to distributors or directly to large users.

About 1,500 distributors supply gas to consumers in local areas. Such firms serve three principal markets: homes, offices, and stores using gas mainly for heating; industrial firms and electric utilities using gas as a boiler fuel to produce direct heat or steam; and industrial firms using gas as a feedstock in the production of synthetics and chemicals.

Government regulates the industry from wellhead to burner tip. The Department of Energy's Federal Energy Regulatory Commission, successor to the Federal Power Commission, controls the activities of producers and interstate pipeline companies. State regulators oversee intrastate pipelines and distributors.

envision the over-all price averaged up close to free-market levels.

This outcome seems especially likely since partial decontrol in 1985 will tend to trigger the "indefinite" price escalation clauses that predominate in recent gas-purchase contracts. Some of these require that upon decontrol wellhead prices rise arbitrarily to, or a percentage above, oil-product prices. The rise in gas prices to some arbitrary level could be generalized, since many other contracts require escalation of prices to the highest price paid for gas in a producing area. Thus, through a chain reaction, significant amounts of gas could run up quickly to very high price levels.

In these circumstances, pipelines with access to only small quantities of controlled gas will find the average price they are paying for gas especially high—a problem in particular for intrastate pipelines which will not have significant cushions of low-priced gas. The result would be a shift in consumption away from users supplied by intrastate pipelines and toward users supplied by interstate pipelines.

As prices rise under the NGPA, it seems reasonable to assume that domestic output, which has been flat since 1975, will at least hold steady. The number of new gas wells completed has been on a rising trend since the early 1970s and is likely to continue increasing during the next several years. Furthermore, reserve additions, which lagged production in every year of the 1970s, have been approximately equal to output during the past two years. Some increase in output is possible—especially since reserves apparently are now being worked at below maximum rates due to relatively weak demand. Moreover, imports of gas from Canada—currently below authorized levels because of weak markets—could be stepped up. And the Mexican government has indicated a desire to increase exports of gas to the U.S.

The impact of decontrolling prices of all gas would depend on how quickly such a step were implemented. Bills in Congress would phase in decontrol over a period of years. Other advocates are calling for an immediate end to price ceilings. In either case—phased-in or immediate—decontrol would have two major effects. First, it would tend to even out wellhead prices which under the NGPA will continue to range widely. This would avoid the potential market dislocation caused by widely different costs for different pipelines. In addition, exploration expenditures would be more efficiently allocated. Whereas now exploration efforts are skewed to high-cost gas, and to gas that can be moved into higher price categories set under the NGPA, the advent of a free market would shift exploration efforts toward more easily exploitable resources. Second, decontrol would accelerate the rise in the average price of gas to market levels, and thus advance the impact of higher prices on output and on consumption.

A decontrol scenario

With immediate decontrol, of course, average prices would rise very quickly. Gas sold under contracts with indefinite escalation clauses would rise sharply, pushing up the average price of gas until it reached market levels. Over time, all gas prices would tend to move toward the average, as existing unescalated contracts expired and were renegotiated at higher prices. As the pool of low-priced gas declined, high-priced gas which had been averaged in with low-priced gas would come down.

Assuming complete decontrol took effect on January 1, 1983 and no substantial change in oil prices between now and then, the wellhead price of gas could be expected to move to around \$3.50 per million BTUs*—up about 40% from where wellhead prices are likely to be in early 1983 under the NGPA. Such an increase in wellhead prices would imply a rise of about 20% in the average price of gas paid by a residential customer and 30% in the average price paid by a large industrial gas user over the prices they would pay in early 1983 under the NGPA. (Any assumption as to the level of oil prices a year ahead, of course, could be far from the mark. With spot-market prices weakening dramatically in recent weeks, the risk now seems to be on the down side.)

Even in the short run of a year or two, gas consumption by current users would likely fall significantly in response to an increase in gas prices to the vicinity of \$3.50. This would occur through added conservation and further switching to coal as the price differential between gas and low-cost coal widened. Some switching to oil, to be sure, might also occur, though gas prices are likely to remain below the cost of oil for the vast majority of users. At the same time, some utilities and large industrial energy consumers are likely to switch to gas—from oil—if, as expected, use restrictions are rescinded along with price controls. In many cases, the fuel choices of utilities and industrial energy consumers have been fundamentally conditioned by use restrictions, by curtailments under the allocation regulations, and by fears of possible curtailments in the future. Presumably for such companies, even with higher prices than prevail at present, gas in an unregulated market would become an attractive option. The process can be thought of as one in which the gas freed up by conservation and by increased use of coal by existing gas users becomes available to utilities and industrial firms which presently depend largely on oil.

The net effect is likely to be little change in

(Continued on page 14)

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*Freed from controls, the price of gas presumably would be aligned fairly closely with the price of residual fuel oil, since electric utilities and large industrial firms employ equipment that can be switched at little or no cost from one fuel to another. With the average price of residual delivered to utilities now around \$4.75 per million BTUs, and with costs of transporting gas from the wellhead to utilities averaging \$1.00 per million BTUs, gas costing the same as oil implies a wellhead price of \$3.75. Presumably, however, gas would have to sell at a slight discount since switching from oil to gas by large users would be needed to offset the decline in the consumption of gas triggered by sharply higher prices.

A REGULATORY MAZE

CONTROL of gas prices in the U.S. since the early 1950s provides a case study of the damage that can be done by government regulation. Controlled low prices for gas—by reducing incentives to conserve and to produce—created widespread shortages by the mid 1970s. The lesson of the damage that regulation can do, however, seems to have been lost—since gas today remains controlled, and by one of the most complex sets of regulation ever devised in Washington.

It all began in 1954 when the Supreme Court held that the Natural Gas Act of 1938 required the Federal Power Commission (FPC) to control the wellhead price of gas dedicated to interstate commerce. Until 1954, FPC authority under the Act was deemed to extend only to the prices that interstate pipelines charged to distributors.

For many years after the Supreme Court decision, extension of controls to the wellhead seemed to do little damage. Gas—which at the time of the decision was selling at only a fraction of the price of oil—continued to be abundant in both the interstate and the unregulated intrastate markets; even with rapidly growing demand, it remained a comparatively cheap fuel source. One measure of the small impact of FPC controls during the late 1950s and early 1960s is that prices in the interstate and intrastate markets were essentially the same.

That situation changed radically in the late 1960s, however, when a decline in gas reserves signaled the end of the era of abundant and cheap gas, and prices began to rise sharply in the intrastate market. Additions to reserves feeding the interstate market actually declined to zero by 1970.

In these circumstances, the FPC permitted the price of newly discovered gas, as well as of gas previously committed under long-term contracts, to rise substantially. By 1976, the price of newly discovered gas dedicated to the interstate market was allowed to move up to $1.45 per thousand cubic feet (mcf), about seven times its allowable limit in 1969. But by that time, prices in the intrastate market had risen even further—to an average $1.60 per mcf. Accordingly, intrastate customers continued to capture the bulk of new supplies.

Shortages in the interstate market were particularly severe in the harsh winter of 1976-77. In addition to permitting higher prices, the FPC resorted to wholesale use of a complex allocation system designed to make gas available to small users, such as home owners, who were least able to shift to alternative fuel sources. For many large users of natural gas, such as industrial firms classified as "interruptible" customers, the winter of 1976-77 brought shortened workweeks and plant closings.

The experience with supply curtailments—which that winter ran as high as 25%—led to a consensus that FPC price controls had failed. They, of course, meant much lower prices for producers than free markets would have provided. But consumers, over all, could hardly have been said to have benefited. For many users, the system was not providing gas at a controlled price but was failing to provide any gas at all. What is more, shortages existed side by side with "excess" supplies of gas in the intrastate market. Intrastate reserves were being exploited at rates substantially below capacity, as producers were unwilling to commit underutilized reserves to the price-controlled interstate market. Thus, the stage was set for legislative change.

Current controls

What finally emerged in 1978 as the Natural Gas Policy Act (NGPA) inevitably was a compromise: among regions of the country; between producers and consumers; among consumers themselves—some of whom, home owners, for example, had profited from the combination of low prices and allocation while others such as industrial users at the end of the allocation queue had been severely hurt.

While the NGPA is enormously complex, the key distinctions of the pricing regulations—between "old" and "new" gas and between interstate and intrastate gas—are relatively simple.*

The Act provides for deregulation of the price of new interstate gas in 1985, but old interstate gas is slated to remain under price control indefinitely. Meanwhile, the two kinds of gas are subject to different pricing provisions. The price of most new gas is allowed to increase each month at the rate of inflation plus a small annual escalation factor, whereas increases in prices of old gas are held to the rate of inflation.†

The price increases allowed in the two cases, moreover, are from different bases. The base price for the new natural gas was set at $1.75 per million BTUs for April 1977, substantially above previous price ceilings; old gas prices for that month in general were based on rates previously set by the FPC: 29½ cents per million BTUs from most wells commenced prior to January 1, 1973; 94 cents from most wells commenced during 1973 and 1974; $1.45 from most old wells commenced thereafter.‡

As for intrastate gas—which was brought under price control for the first time—the NGPA also allows for decontrol in 1985 if the contract price at that time exceeds $1.00 per million BTUs. As a practical matter, most intrastate gas would meet this test. Prior to decontrol, sales under existing contracts are subject to the contract price or the price set on new gas, whichever is lower. In the event contract prices are higher, however, producers need not roll back prices to the level of new gas prices, but are permitted to escalate them by no more than the rate of inflation.

Production from several categories of wells considered to be "high cost" was allowed considerably higher prices. For example, gas from "stripper" wells (those producing less than 60 mcf per day) was allowed $2.09 per million BTUs as a base price, plus inflation and the escalation factor. Gas produced from wells below 15,000 feet was decontrolled in 1979.

In addition to controlling wellhead prices, the NGPA mandates "incremental pricing"—a pricing system that, in general, protects the small consumer. It requires that pipeline companies pass along the cost of high-priced gas to large industrial users—at least until such users are paying a price equivalent to oil prices for equal heat content.

Use restrictions

While the emphasis of gas regulation, now as in the past, is on price, another piece of 1978 legislation—the Powerplant and Industrial Fuel Use Act—sets restrictions on usage. It bans the use of gas (and oil) in new electric generating stations and new large industrial boilers. Recently, however, the Department of Energy almost routinely has been exempting industrial companies and utilities from these restrictions, because gas supplies have been ample and because switching from oil to gas has meant major cost savings for the firms covered by use restrictions.

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*The distinction between old and new gas hinges on when a well was spudded—that is, on when drilling first began. New gas is defined in the NGPA as gas from any well spudded on or after February 19, 1977. A somewhat different definition is used for gas from outer continental shelf leases.

†If production is from a new well at least 2.5 miles away from (or 1,000 feet deeper than) any existing well or from a new reservoir, its price is permitted to rise by inflation plus an escalation factor (3.5% per year prior to April 20, 1981, then 4.0% per year) until decontrol on January 1, 1985. If production is from any other new well, the price is allowed to rise only with inflation—and, for such wells less than 5,000 feet deep, decontrol is postponed until July 1, 1987.

‡One million BTUs, the pricing measure used in the NGPA, is roughly equivalent to a thousand cubic feet.

the over-all level of gas consumption; an increase in coal usage; and a drop in the consumption of oil, which, of course, would reduce oil imports. The magnitude of such reduction, however, can only be guessed at. But the importance of gas in the total U.S. energy supply—about 25%—suggests that the short-run potential saving on oil imports would be significant. For example, if gas consumption by current users were to drop as little as 5%—a figure not especially large when compared with the dramatic response to the recent round of oil-price increases—and if that supply were to be absorbed by utilities and industrial users switching to gas, net oil imports would decline by 500,000 barrels per day or by almost 10% from last year's level. Such saving presumably would grow over time as the price incentives of decontrol resulted in increased gas output.

Revenue and price effects

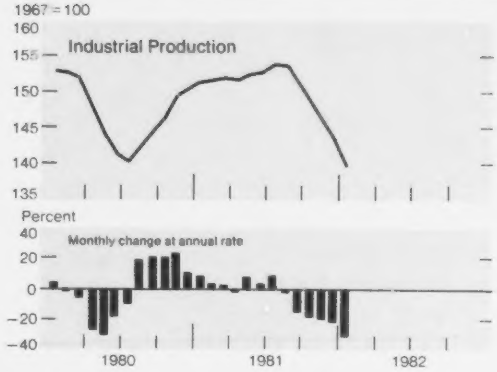
The revenues of gas producers now are running at an annual rate of roughly $40 billion. By the end of this year, under the NGPA, revenues should rise to an estimated rate of $50 billion. If controls were removed on January 1, 1983—and the average wellhead price of gas were to increase to $3.50 per million BTUs, as suggested earlier—producer revenues would rise by something like $20 billion in the first year. Subsequently, however, gas prices would tend to increase less rapidly than under the NGPA, and so would producer revenues. Prices and producer revenues would likely be little different in 1985 from their levels under the NGPA. If a "windfall profits" tax covering existing production and structured like that on oil were enacted, decontrol would increase federal revenue about $10 billion annually.

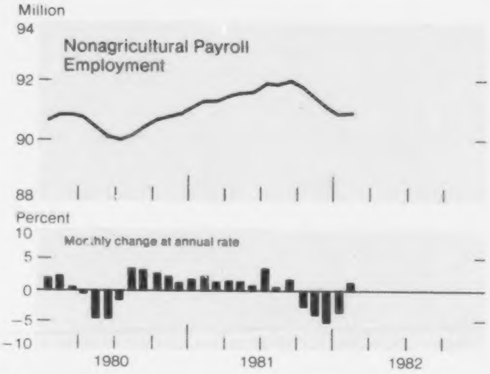
The potential direct impact on inflation would be on the order of three quarters of one percentage point, assuming that all of the increase in wellhead prices were passed through to consumers. The actual impact on inflation of complete decontrol, however, would depend on the extent of the pass-through and on whether the Federal Reserve accommodated higher near-term inflation via higher money growth. The net effect, assuming partial accommodation by the Federal Reserve and less than full pass-through of costs, would be a somewhat higher rate of inflation in 1983 (say, half a percentage point or so) than under the NGPA. With decontrol, however, inflation would be lower in 1984 and 1985, years when, under NGPA, gas prices would still be rising rapidly toward free-market levels.

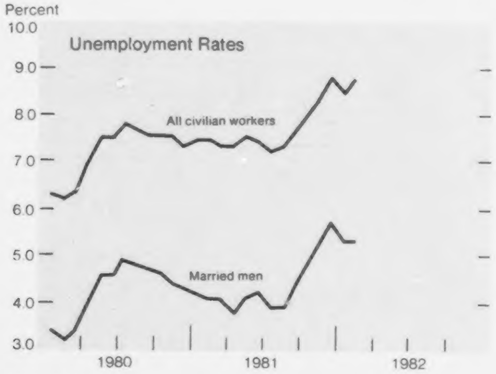
From the standpoint of the over-all national interest, the advantages of decontrol—especially if promptly implemented—would far outweigh the disadvantages. Efforts to reduce the budgetary deficit would get a significant lift. The nation would gain increased security of energy supplies. And it would benefit also by achieving efficiency in its exploration efforts and by getting rid of a maze of regulation that is now constraining the industry.

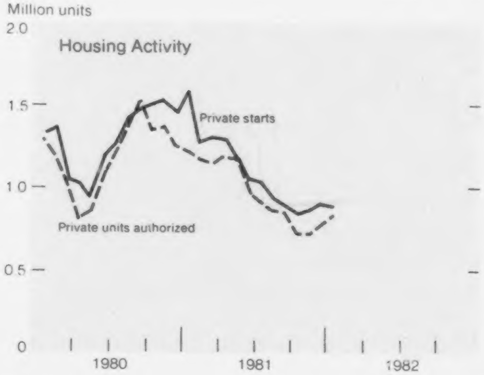
The one negative factor—some added pressure on the over-all price level—would be only a temporary liability. Getting the price impact up front, in fact, probably would limit the long-run inflationary consequences of moving gas prices up to market levels. A one-time jump in prices would be less likely to become embedded in inflation expectations, and thus in wage increases, than a drawn-out process. Moreover, the prospect of relatively weak oil markets over the next year or two affords a uniquely favorable opportunity to ease the transition to higher gas prices.

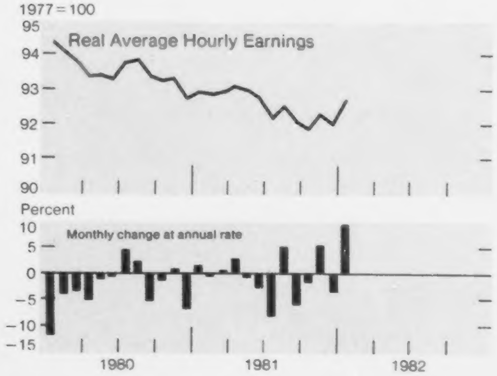
ECONOMIC INDICATORS

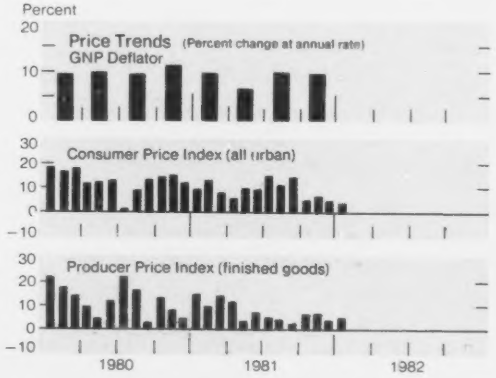












NOTE: All data are seasonally adjusted. Hourly earnings are adjusted for overtime hours in manufacturing and for interindustry employment shifts.

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Inventory Patterns. *Massive swings in inventory investment brought on the recession. Now the prospect is for a shift in business stocks that will trigger a second-quarter upturn.* 1

Economy Watch. *Despite recent hesitancy, "real" GNP should rise this quarter. Latest economic projections through yearend.* 5

Older Americans. *Destitute and neglected? Or reasonably comfortable? The latter seems to be the more accurate description for most. An economic profile of the elderly.* 6

Auto Outlook. *Sticker shock . . . a perceived quality "gap" . . . the energy squeeze—all have contributed to the auto slump. Look for a pickup later this year, but no boom. An analysis of the auto market, and how Detroit is coping.* 9

Inventory Cycles and Economic Recovery

THE slide in economic activity is close to bottoming out, in the view of most analysts, but there is less agreement on the timing of the next upswing. The Morgan Bank's view is that the economy will turn upward moderately in the current quarter (Economy Watch, page 5).

Critical to that judgment are the dramatic shifts that have been taking place in business inventories. On the basis of data through February, it appears that "real" inventories were reduced by more than $15 billion at an annual rate in the first quarter—the largest drop since the end of World War II. While nearly half of that decline was due to a sharp reduction in stocks of automobiles, liquidation also occurred at nonauto manufacturing and trade establishments.

Last fall, when the economy reached its cyclical peak, businesses were adding to their inventories at a $15-billion clip. The sharp reversal—from accumulation of stocks to massive liquidation—more than accounts for the entire $30-billion decline in real GNP during the current recession.

But the inventory cycle also can produce positive effects. The mechanical process of bringing stock liquidation to a halt—accompanied by attendant rises in production and income—can provide an important trigger for expansion. Indeed, this bank expects a reduced pace of inventory drawdown to provide the major source of lift in the spring months. And, with final sales growth expected to remain exceptionally weak, the "automatic" inventory rebound is likely to explain the bulk of the coming upturn—in sharp contrast to past recovery experience (table on page 2).

Inventory Behavior: A Key to the Business Cycle

(Percent of "real" GNP change attributable to inventory swings)

		Recovery	
	Recession	*First 2 Qtrs.*	*First 4 Qtrs.*
Cycle:			
1953-54	45.5	27.6	26.8
1957-58	45.7	34.8	26.7
1960-61	209.3	39.4	27.7
1969-70	109.4	37.0	30.2
1973-75	62.6	36.3	30.0
Average	94.5	35.0	28.3
1980	*	*	20.2
1981-82 (proj.)	109.5	96.4	54.3

NOTE: Recession periods date from real GNP peak to real GNP trough; recovery periods are dated from GNP trough. During the 1980 business cycle, inventory investment (*) actually increased during recession and then contracted during first two quarters of recovery.

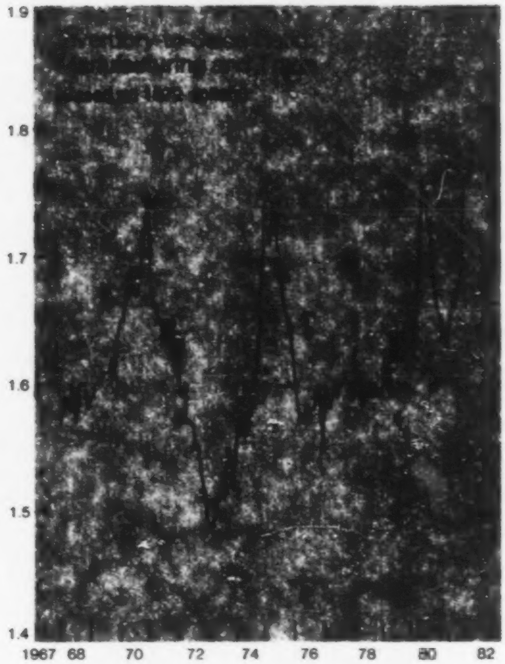
There are risks, of course, that the inventory cycle this time might not be quite that vigorous. That's a real possibility as recent experience suggests that profound changes have occurred in inventory-management practices. Two forces appear to have been at work. First, accelerated refinements in inventory-control techniques have reduced the stock requirements for a given pace of sales. Second, the high levels of market interest rates, together with the unusual volatility of credit market conditions generally since late 1979, have significantly raised the price business has to pay to carry inventory. These forces have acted to restrain inventory investment since late 1979. Whether or not such restraint persists in 1982 will importantly influence the degree of economic lift provided by the inventory cycle.

Tighter inventory controls

Techniques of inventory management were proved to be quite deficient by the 1974-75 recession, the worst in post-World-War-II experience. Almost two thirds of the 4.8% drop in the nation's output in that recession can be explained by the correction of inventory excess. Chastened by that experience, inventory managers sought improved control methods.

At the retail level, a proliferation in the use of automated check-out facilities has given management almost instantaneous access to current information on trends in sales and stocks. At the manufacturing level, the growing acceptance of material-requirements planning, which stresses master scheduling and computerized control procedures, has increased the efficiency of purchasing techniques. All in all, these and other improvements in the technology of inventory control have succeeded both in keeping stocks and sales in closer alignment and in reducing stock requirements for many product lines.

Consider, for example, the latter half of the Seventies. Unlike the pattern during the first half of the decade, major swings in stock/sales ratios in recent years were confined solely to periods of recession (chart on page 3). Between 1976 and 1979, in fact, movements in such ratios were held to a relatively narrow range—contrasting sharply with the wide swings that preceded the 1974-75 recession. Despite these improvements, however, inventory management still faces recurring problems. In each of the last two years, for example, stock overhangs mounted to levels that were historically quite high. The key to such mistakes appears to be less on the inventory-control side of the equation and more on the inability of businesses to forecast sales trends accurately. This was especially true in the 1980 recession when the imposition



of credit controls induced an unexpectedly severe jolt to sales.

How have improved controls been implemented? In the manufacturing sector some insights into the process of inventory control are provided by data on inventories at various stages of the production process (table on this page). Since 1970, manufacturers have succeeded, to some extent, in pushing stocks "downstream"–that is, in keeping less inventory on hand at the finished-goods stage of production and more in the form of materials and supplies. As the Japanese have found, this helps smooth the production process by limiting the backup of assembled goods in the face of unexpected drops in sales. At the same time, however, if sales show an unexpected burst, materials are on hand to speed up assembly schedules.

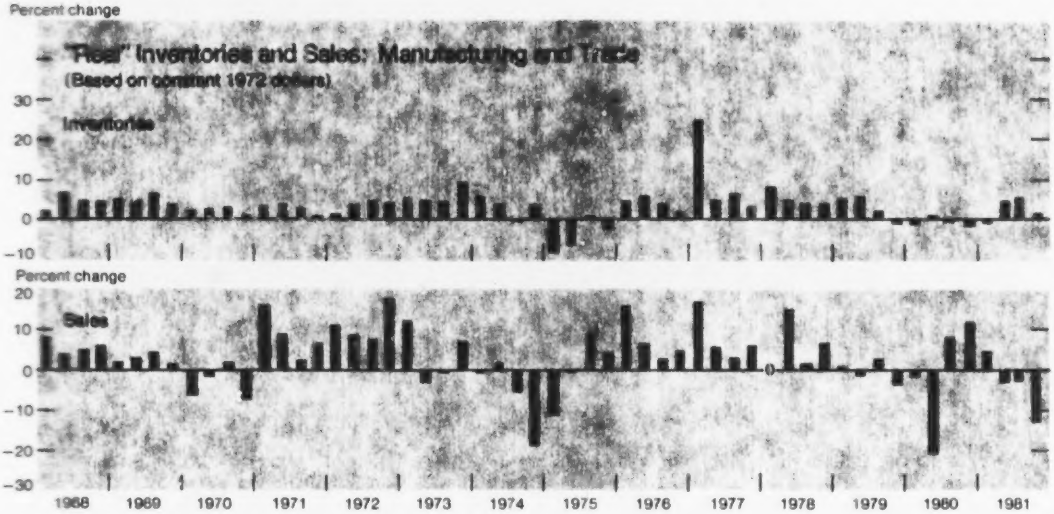
For trade establishments, production smoothing is not a critical concern of the inventory management process. Typically, for wholesalers and retailers, stocks are monitored closely relative to sales, with restocking or liquidation occurring only if inventories move outside a narrow "range of tolerance." Such an inventory strategy is designed to minimize the costs of placing frequent orders with suppliers. The absence of any significant inventory cycles in the trade sector since 1974-75–barring the well known problems of auto dealers–suggests that considerable progress has been made in inventory control by retailers and wholesalers.

But much more can still be accomplished by further improvements in inventory-control techniques. The ultimate in such methods is the Japanese concept of "just-in-time" inventory management. Under *Kanban*, as Toyota calls it, materials requirements are first adjusted at the assembly-line level and are then passed down through successive work stations. Stocks enter various phases of the production process –under very efficient vendor delivery arrangements–only when they are needed. Lead times between materials entry and final assembly are thus shortened dramatically. Applications of *Kanban* to U.S. industry are limited, to some extent, by less flexible supply networks than those existing in Japan. Even so, such procedures increasingly are under study by many

Changing "Mix" of Factory Stocks

(Percent of inventories by stage of processing)

	1970	*1975*	*1980*	*1981*
Manufacturing total	100.0	100.0	100.0	100.0
Materials and supplies	31.6	36.4	35.1	34.3
Work-in-process	35.4	32.4	35.0	35.8
Finished goods	32.9	31.1	29.9	29.9



"Real" Inventories and Sales: Manufacturing and Trade

(Based on constant 1972 dollars)

manufacturing companies in the United States.

The very special nature of the 1980 recession makes it difficult to draw unqualified conclusions on the changing role of the inventory cycle. However, the transformation of business-inventory behavior is one that appears to predate that credit-controls-induced disruption. Indeed, over the six-quarter time span—fourth quarter of 1979 to the first quarter of 1981—business inventories were liquidated in all but one quarter (chart on this page). Such a pattern is without precedent in U.S. postwar experience, and it is probably no coincidence that such efforts to restrain inventory investment can be associated with the extraordinary volatility of credit market conditions since late 1979.

In fact, in this environment of financial market uncertainty there has been an obvious quantum jump in the price business establishments now have to pay to carry inventory. Such sharp increases in carrying costs appear, at least in retrospect, to have had a critical conditioning influence on the very cautious tone of the inventory rebound after the short but precipitous 1980 slump. And if anything is clear from that recovery period, it is that increased carrying costs, together with continued refinements in inventory-control techniques, can act together to limit voluntary inventory accumulation—irrespective of the inherent tendencies of the "classic" inventory cycle.

That is the lesson that appears most relevant in assessing the prospects for recovery in 1982. Clearly, given the uncertainties associated with prospective trends in interest rates, there are genuine risks that businesses may be reluctant to restock even moderately. A repetition of last year's disorder in financial markets could turn the supportive role of the expected inventory rebound into a more passive one—resembling the pattern which occurred in the aftermath of the 1980 recession when stocks dropped a bit in the first three quarters of recovery. A repetition of such a pattern in 1982 obviously would deal a heavy blow to the expected recovery.

ECONOMY WATCH

THE economy appears weaker than it did a month ago. Even so, a reduction in the rate of inventory liquidation (story on page 1) is likely to result in a small increase in "real" GNP in the current quarter. That and the personal tax cut scheduled for July 1 are expected to keep the economy moving forward for the remainder of the year (accompanying table) despite continued monetary restraint.

Severe weather earlier this winter distorted many economic indicators. But March numbers, free of such influences, point at best to only a hesitant upturn in economic activity. Labor market statistics, for example, showed continued weakness, with a rise in unemployment to 9% and a further drop in nonfarm payroll employment to a level 300,000 below December's level. Moreover, auto sales were sluggish last month, despite rebates, and early signs point to a drop in industrial production in March.

The decline in production and employment probably reflects the lingering impact of stubbornly high interest rates. Over the near term, the outlook for rates hinges importantly on the behavior of the monetary aggregates and on the size of prospective budget deficits.

For the next several weeks, monetary developments will be especially difficult to interpret. During four of the past five years, the seasonally adjusted monetary aggregates have grown rapidly in early April. However, the most recent minutes of the Federal Open Market Committee suggest that the Fed may be flexible in responding to any such bulge. Having maintained a firm posture since the start of the year, the Fed has managed to bring M1 down to a point barely above its target range. Thus, the Fed may feel that it has established sufficient credibility regarding its intentions to achieve its long-run targets that it need not respond to short-term movements in the aggregates in a purely mechanical fashion.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1981	*1982*			
	Q4	*Q1*	*Q2*	*Q3*	*Q4*
Real GNP	−4.5	−2.9	1.2	3.3	3.1
Real consumer spending	−2.2	3.5	1.4	3.3	3.5
Real business-capital outlays	−2.9	2.3	−10.8	−0.7	0.7
GNP deflator	9.5	5.7	5.5	6.2	6.5
Consumer prices	7.8	3.7	3.1	6.7	6.9
Real disposable personal income	1.7	−0.7	0.8	8.4	1.6
Saving rate (%)	6.1	5.1	5.0	6.1	5.7
Housing starts (Millions)	0.9	0.9	1.0	1.1	1.1
Auto sales (Millions)	7.4	8.2	8.6	9.1	9.3
Unemployment rate (%)	8.4	8.8	9.1	9.2	9.3

NOTE: 1981 Q4 data are actual. Approximately one percentage point of the rise in the GNP deflator in the fourth quarters of both years reflects the timing of federal pay increases.

The Morgan Bank forecast assumes that any April bulge in the monetary aggregates will be short-lived, and that short-term interest rates will decline at least moderately from their March averages. Sustained recovery, of course, will require lower long-term interest rates—something that is critically dependent on resolution of the current fiscal impasse in Washington.

Older Americans: How Needy Are They?

THE elderly in this country are destitute, enfeebled, neglected, and hungry—according to the stereotypic view often depicted in newspapers and on TV.

There is another, quite different, characterization of the elderly put forth by analysts—including those in the Reagan Administration. Those analysts, emphasizing the image of the "wellderly," stress that most older Americans live in houses they own, on adequate incomes, in good health, and with sufficient companionship.

Which view of the elderly is the correct one? The answer is that both can be documented. The confusion comes from treating the elderly as a single group.

Many of the nation's older people—particularly the "old, old" (beyond age 80)—are living in pinched circumstances. Their poverty is no myth. But a large, and growing, proportion of older Americans is relatively comfortable, in no danger of lapsing into grinding poverty.

Who are the elderly—and how are they faring today compared with conditions ten or twenty years ago?

There are just under 26 million Americans age 65 or older, about one in nine of the total population. Back in 1940, the elderly accounted for only one in fifteen. By the year 2020 (when the baby-boom generation of the 1950s reaches old age) the elderly will number roughly one in five of the population.

Roughly 9 million of the elderly—a little more than a third—are in the 65-to-69 age bracket. With today's medical advances, however, people age 80 and over are living on in sizable numbers (just over 5 million). There are 12,000 centenarians in the population.

Life expectancy at age 65 averages sixteen years (eighteen years for women and fourteen years for men). A disproportionate share of the elderly are women: At age 65 there are 130 women for each 100 men. At age 75 there are nearly twice as many women as men. Of men over 65, 18% held a job in 1980; 8% of the women in that age group were working. Just over 1 million of the elderly—about 5%—are in nursing homes.

Measuring well-being

Many Americans appear to be ill-informed about senior citizens and their economic well-being. That is indicated in a recent nationwide poll commissioned by the National Council on the Aging, an advocacy group for the elderly. The poll, conducted by the Louis Harris organization, covered 3,437 adults, including 540 over age 65. A major finding reported by the pollster: "On every single issue tested, the elderly are perceived as being in much more desperate shape than they actually are."

Government statistics tend to confirm an improved economic condition for the elderly.

Poverty. An overwhelming majority of the 65-and-over population are not impoverished. In 1959, 35% in that age group were classified as poor, compared with 22% of the total population. By 1980, 15.7% of those 65 and over were considered to be living below the poverty line—compared with 13% in the rest of the population. The incidence of poverty, thus, has shrunk more rapidly among older Americans than among the general population.

Income. Incomes of the elderly are lower, of course, than when they were younger, since, for the most part, they no longer are in the work force. But needs for money are lower too—mainly because major child-rearing expenses are

Income Gains of the Elderly vs. Younger Age Groups

(Percent change at annual rate between 1970 and 1979)

	Age of head of household				
	25-34	*34-45*	*45-64*	*25-64*	*65+*
Total household income	12.4	10.2	8.8	10.1	11.4
Total households	4.7	1.9	0.6	2.1	2.8
Income per household	7.3	8.1	8.2	7.8	8.8
Percent distribution of total household income, age 25 and over:					
1970:	20.0	23.4	45.3	88.8	11.2
1979:	23.9	23.4	40.5	87.7	12.3

SOURCE: Census Bureau

over. The median income of households headed by elderly persons was $11,316 in 1979—about 53% of the $21,200 median income of younger families. Single elderly persons did not fare quite so well—with median income of $4,653 (48% of median income of younger single persons).

Income share. Income per household of the elderly has been rising at a brisk pace. For example, income per household for those 65 and over rose at an 8.8% annual rate between 1970 and 1979, faster than the household incomes of most other age groups (accompanying table)—due mostly to the sharp rise in Social Security and other retirement incomes. Whereas the elderly accounted for 11.2% of the household income of the total population in 1970, that share had risen to 12.3% by 1979.*

Housing. Just over 70% of household heads in the group aged 65 and over were homeowners rather than renters, according to the Census Bureau's latest housing survey. What's more, three out of four of the single-family homes were mortgage-free.

Congressional scrutiny

The elderly could come under increased scrutiny in coming months as Congress casts about for ways to head off massive budget deficits. Outlays for the older population—most importantly for Social Security and Medicare—now exceed $160 billion annually, a five-fold increase in the past ten years. Federal spending on the elderly in 1965 accounted for roughly 14% of total federal spending. At latest count such outlays had climbed to 29% of all federal spending.

In addition to spending programs, the elderly have been granted special tax relief. For example, Social Security benefits are tax-exempt even though half of the payments made into the fund—those paid by employers—were deducted as a business cost and thus represent income

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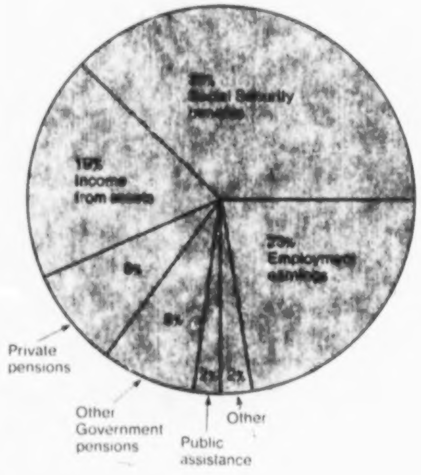
*Adjusted for taxes and inflation, there has been an even more dramatic rise in the elderly share of income, according to Professor Michael Hurd, of the State University of New York, and Professor John Shoven, of Stanford. In a paper presented to the American Economic Association meetings in Washington, D.C., last December, the authors showed that elderly households had on average 60% as much "real" after-tax income as the average household in the entire population in 1970. By 1978 the share of such income accounted for by the elderly had risen to 68%. "This change in the relative position of a large sub-population over such a short time interval is remarkable," the authors stated.

Shares by Income Sources for Those 65 and Over in 1978



SOURCE Social Security Administration

that has never been taxed. The U.S. Treasury calculates that exclusion of Social Security benefits from income tax will result in lost revenues of $13 billion this year. Moreover, an additional income-tax exemption given to each person 65 and over will cost the Treasury $2.4 billion in revenues this year.

Already, calls are being heard for reductions in a variety of benefit programs, most of which make payments without a means test to show financial need. For example, consider this recent comment by Peter G. Peterson, a former Secretary of Commerce who is currently chairman of Lehman Brothers Kuhn Loeb: "The safety-net programs–Social Security retirement and disability payments, Medicare, veterans' benefits, railroad retirement and federal-employee pensions–have in common one characteristic: poverty or financial need is *not* a test for receiving the benefits. For this reason, the programs end up subsidizing the middle class far more than the poor."*

Any attempts to pare tax or spending benefits for the elderly are certain to run into stiff opposition from various lobbies for the aged. President Reagan's unsuccessful effort last year to reduce benefits for those electing early retirement under Social Security attests to the unpopularity of such moves. Perhaps the serious fiscal straits of the U.S. Treasury will make Congress more willing to consider such changes this year, but with an election in the fall the prospects cannot be rated high.**

A society should be judged, it is said, by what it does for its old people. The record for the U.S. does not support the stereotypical view of the elderly as being in desperate economic and financial straits.

Older Americans are proud and they cherish self-reliance. That reality, often obscured in the political rush of the past decade to enlarge benefits, offers hope for change. The elderly, perhaps more than other groups in the population, are aware of the pressing need to hold down federal spending. As James M. Hacking, assistant legislative counsel for the American Association of Retired Persons and the National Retired Teachers Association, put it last month: "Old people, like everyone else, want the budget brought into balance."

Scaling back budget growth needs to be a wide-ranging exercise, sparing only programs for the truly needy. Such a quest, in fairness, should not automatically exclude all the elderly.

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*"No More Free Lunch for the Middle Class," *The New York Times Magazine*, January 17, 1982.

**As lawmakers are well aware, the elderly turn out on Election Day. In 1978 (latest data available) 55.9% of the 65-and-over population voted. The only age group with a stronger showing: 45 to 64, with a 58.5% turnout.

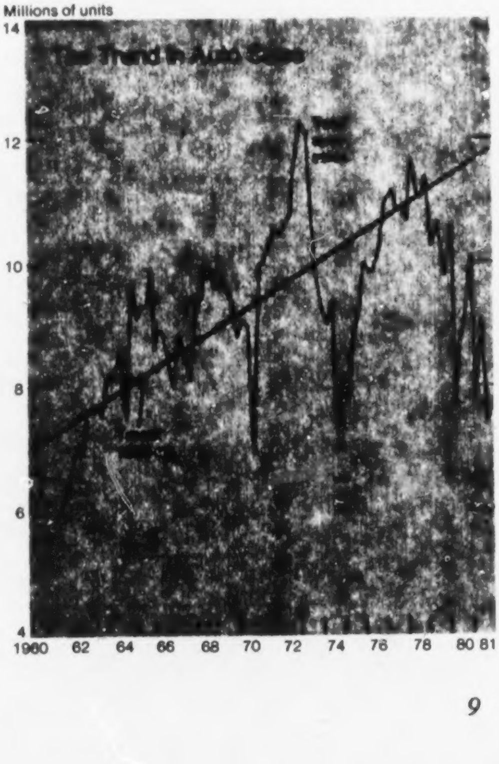
Auto Outlook: Gains Ahead But Problems Remain

TRENDS in automobile sales, after a disastrous three-year slide, may soon be heading upward. Though car sales have been disappointingly low so far this year—mainly because of the prolonged recession—they should pick up moderately in the second half. Spurred by an upturn in over-all economic activity, sales of domestic and foreign makes combined should reach an annual pace of 9¼ million units by yearend. While this would be an improvement on the rate of less than 8 million units in late 1981, the longer-term vigor of auto demand still remains far from assured—despite some recent positive developments.

Key among these is the changed outlook for energy prices. The steep rise in oil prices of recent years stands little chance of being repeated in the years just ahead. Indeed, with gasoline and oil prices now softening considerably, household budgets should have more room for new-car purchases. Moreover, with consumers having kept their cars longer, on average, than in the past, and with the used-car market strong, the conditions are more conducive for trading in an old car for a new one. Even so, optimism about the sales outlook needs to be tempered. In particular, "sticker shock"—which reflects a broad malaise of the car-buying public (box on page 14)—remains a real problem for Detroit.

Industry's response to consumer disenchantment has produced some encouraging changes. Among them is the recent agreement between the United Auto Workers Union and Ford Motor Company, which could reduce labor costs over the next few years by roughly $200 per car. A similar agreement between General Motors Corporation and the UAW is expected to win rank-and-file approval shortly. These developments, together with a somewhat greater cost-concession arrangement already in effect at Chrysler Corporation, reflect recognition that American companies face a ferociously competitive world car market. Nonetheless, these labor give-backs cover only a small portion of the differential between U.S. and Japanese costs per car, estimated currently to be in the $1,000-to-$1,500 range. Recognizing that the battle with foreign competitors will be fought on other fronts as well, Detroit's auto makers are producing fuel-efficient autos of improved quality and are displaying a new "gloves off" approach, stressing the comparative safety of U.S.-made vehicles.

But, most assuredly, the U.S. auto industry has a long way to go before health and vigor are restored. The downtrend in car sales over



The Consumer Auto Budget

(Spending as a share of disposable personal income)

	1960-69	*1970-79*	*1981*
Auto-related outlays	11.1	11.8	11.9
New cars	4.0	3.3	2.4
Other vehicles and parts	1.8	2.6	2.4
Gasoline and oil	3.2	3.5	4.7
Miscellaneous	2.1	2.4	2.3

NOTE: Other vehicles and parts include consumer trucks, recreational vehicles. net purchases of used autos, and tires, tubes, accessories and other parts. Miscellaneous auto outlays include repair, greasing, washing, parking, storage, rental, tolls, and auto insurance premiums less claims paid.

the past three years represents a long and sharp deviation from the auto market's apparent underlying growth path (chart on page 9). Indeed, over the past three years auto sales have sagged a cumulative total of 6¼ million units below what could be called "normal" growth. The severity and duration of that drop have raised many questions about underlying trends in automobile demand. Factors critical to reaching a judgment on such fundamentals include the following.

Energy and the Auto Budget

The impact of the car on the budget of the American consumer goes well beyond the basic cost of acquiring a motor vehicle. Repairs, new parts, insurance, and fuel are all part of the steady stream of the consumer's auto-related purchases. As the table on this page shows, in 1981 the sum of all consumer spending on "user-operated transportation," as the government calls it, was 11.9% of disposable personal income—unchanged from the average of the Seventies and up only slightly from the previous decade. The relative stability of the income share of such expenditures suggests that, at least in the aggregate, total outlays for auto-related needs are not presently placing any acute strains on household budgets.

Nonetheless, the composition of the consumer auto budget has changed significantly. Whereas in the Sixties over a third of this budget was earmarked for new-car purchases, that portion has dropped steadily so that in 1981 new-car outlays made up only around a fifth of the consumer's auto-related spending. Behind this reduction in car purchases relative to income lies the steep runup in gasoline prices. With gasoline costing $1.35 per gallon at the pump in 1981, up nearly four times from the 1973 pre-embargo price level, outlays on gasoline by the car-driving public rose sharply relative to income—despite a reduction of miles driven in recent years. Indeed, at 4.7% of disposable income in 1981, gasoline and oil purchases accounted for 40% of the consumer's entire auto budget. As a result, mounting operating costs have absorbed funds that typically had been earmarked for the purchase of new cars. Consumers have, in response, "financed" this energy burden in part by electing to hold on to their cars longer.

Thus, the consumer response to soaring energy prices looms as a critical factor behind the depressed state of the auto market. But, as noted earlier, the improved outlook for energy prices (compared with the skyrocketing prices beginning in late 1973) points to a sharp reversal in the household energy squeeze. However, it takes a while for such developments to work their way through the consumer budget. Indeed, judging from recent shifts in the composition of the household auto budget, the shock waves of "OPEC II"—which first hit with a vengeance in the spring of 1979—have only just dissipated. Accordingly, the positive effect of the current oil glut on auto sales cannot be expected to materialize overnight.

Sticker Shock

In 1981 consumers paid nearly $8,700 for the typical car—almost two and a half times the average price a decade earlier. Increases in auto prices have accelerated sharply in recent years, climbing by over 14% in 1981 alone.*

This steep climb in auto prices, year after year, obviously has exerted a negative impact on consumers. In the past, when prices were reduced through rebate programs, for instance, sales immediately perked up. When such special price concessions were ended, sales languished again. Although recent experience with rebates is less conclusive—probably because the continuing recession has swamped the impact of price reductions—it is clear that auto buyers remain price-sensitive. Still, a closer look at sticker shock reveals some significant misconceptions about its effect.

For instance, despite the steep runup in auto prices and the high levels of auto finance rates, the repayment burden associated with the typical car loan, on average, does not appear to be placing any increased stress on consumer take-home pay. The table on this page compares the typical auto loan in 1981 with its counterpart in 1975. While average car prices rose by 76% and interest rates on car loans rose by 45% over that period, a lengthening of auto-loan maturities helped hold down increases in annual loan payments. What is more, since household disposable income rose by over 60% during that period, the annual repayment of the typical new car loan was 10.9% of disposable household income in 1981—actually somewhat below that of 1975 (left chart on page 12).

The Arithmetic of Auto Finance

	1975	*1981*	*Percent increase*
Average car price, foreign and domestic ($)	4,948	8,689	75.6
Amount financed ($)	4,305	7,473	73.6
Loan maturity (months)	37.6	45.2	20.2
Finance rate (%)	11.4	16.5	44.7
Annual loan payment ($)	1,640	2,677	63.2

NOTE: Calculated from U.S. Department of Commerce data on average unit car prices and from Federal Reserve data on loan-to-value ratios, average loan maturities, and finance rates.

Moreover, high prices have not deterred the purchase of all types of cars. For example, prices of imported autos have moved up steadily relative to prices of domestic cars. In 1981, at over $8,800, average foreign-car prices were about $200 higher than average prices of domestic models; in contrast, as recently as 1977 imported autos were about $900 cheaper than the average domestic model. But foreign-car sales have continued to take an ever-increasing share of the U.S. auto market (right chart on page 12).

By inference, then, sticker shock appears to be something other than a simple reaction to the high level of car prices. The steady encroachment of foreign cars in U.S. markets, together with a "tolerable" repayment burden of today's typical auto loan, suggests that the consumer's auto-price aversion reflects a number of other considerations.

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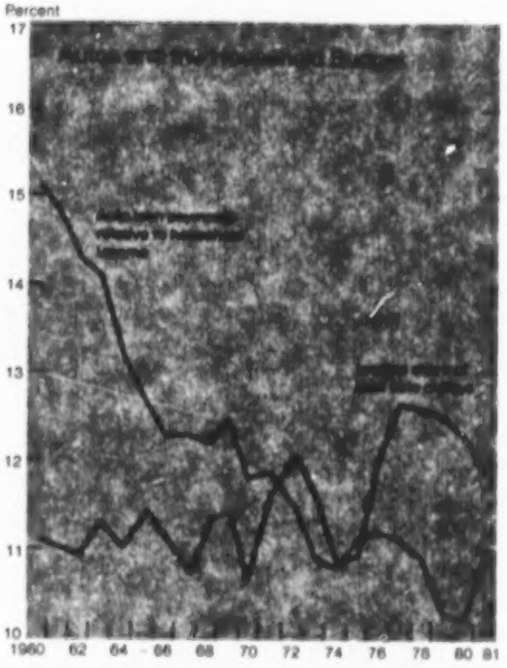
*Due to model changes and quality adjustments, measurement of aggregate prices for new automobiles is clouded by imprecision. The prices cited above are average unit prices (on a transactions basis) as constructed by the Department of Commerce in the estimation of the economy's gross auto product. Since such an index also reflects the changing mix of auto sales, the mounting share of lower-priced smaller cars may bias the over-all index downward.



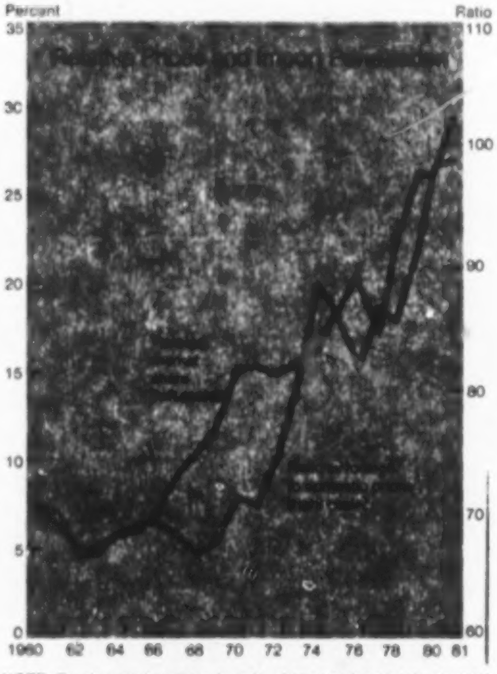
NOTE: Historical data on auto loan payments provided by General Motors Acceptance Corporation. Income share of total auto outlays is consumer outlays on "user-operated transportation" relative to disposable personal income.

Perceived quality advantages of imported cars are one such consideration. Detroit's response has concentrated increasingly on closing this "quality gap." The size of all models continues to decline and the introduction of front-wheel-drive vehicles in all size classes is scheduled to proceed at an accelerated pace. Fuel efficiency continues to improve, and significantly enhanced quality control programs have been instituted on most domestic assembly lines.

Cutting the sticker price, of course, would have a positive impact on consumer psychology. Well aware of this, domestic producers are pushing a three-pronged program to reduce costs—productivity improvements, wage-bill reductions, and price concessions from suppliers. At present, wage concessions appear to be the linchpin of this program. Even so, the labor give-backs that have been negotiated can realistically be expected to close, at most, one third of the cost gap between U.S. and Japanese producers. This underscores the industry's need to move ahead forcefully on all elements of the cost-reduction program.

Longer-term Fundamentals

Consumer response to variations in car prices and income have, over time, been critical determinants of most short-term swings in auto sales. But changes in auto demand also reflect a longer-term evolution of consumer attitudes toward cars. Chief among such influences:



NOTE: Foreign market share is ratio of imported auto sales to total foreign and domestic sales. Ratio of foreign to domestic prices is on a unit value basis as constructed by the U.S. Department of Commerce.

Replacement demand. The wear and tear of driving obviously means that cars eventually need to be replaced. As auto sales have dropped, life of the average car on the road has risen to about 6½ years in 1980—up a full year from the figure a decade earlier (accompanying table). Reflecting that trend, the scrappage rate of old cars—the percentage of vehicles six years and older that are retired from use—dropped significantly in the latter half of the Seventies. But, while consumers clearly are hanging on to their cars longer, this does not necessarily imply a sudden burst of sales to replace the aging auto stock. If renewed budgetary strains surface, for instance, the consumer could decide to spend more money on repairs to keep the old heap running rather than trade it in on a new model. Though that becomes impractical at some point, a basic question is how long the current low scrappage rate will continue to hold down new-car sales. Replacement is not so easily predictable now as in earlier years, when many buyers routinely traded in their automobiles every few years.

Driving mileage. A boost for replacement demand might be expected on the basis of the past trend toward steadily expanding auto travel, which, if continued, would put strains on the aging auto fleet. But old habits seem to be changing in this respect. In 1980 total vehicle miles traveled by passenger cars dropped for the second successive year—reversing the long-term trend. On a per-vehicle basis the drop in miles driven was even more dramatic as the volume of car registrations trended up. Indeed, in 1980 average annual mileage per car was only a little over 9,100 miles—almost back to the level in 1950. As might be expected, reduced driving has coincided with the emergence of the consumer energy sensitivities of the Seventies. The effects of higher gasoline prices are shown in a study by The Hertz Corporation: Expenses associated with the maintenance of a typical intermediate size car rose, on average, by 12½% per year over the 1974-81 period, after fluctuating in a narrow range from 1960 to 1973.

Auto Demand: Some Basic Factors

	1960	*1970*	*1980*
Average age of cars in use (years)	5.9	5.5	6.6
Scrappage rate (%)	16.6	22.7	17.4
Travel per car (miles)	9,446	9,978	9,135
Operating expenses (¢/mile)	14.4	19.0	44.0
Fuel consumption per car (gallons)	661	735	603
Auto share of total motor vehicle travel (%)	81.8	79.5	73.7
Population growth: 25-to-54 year olds (%)	0.5	1.5	1.6

NOTE: Scrappage rate is number of passenger cars retired annually as a percentage of cars in operation that are at least six years old; calculated on basis of R. L. Polk and Company data. Data on age, travel mileage, fuel consumption, and auto share of vehicular travel taken from "Facts and Figures '81" published by the Motor Vehicle Manufacturing Association of the United States. Operating expenses taken from The Hertz Corporation's 1981 study of annual auto expenses. Population statistics from Census Bureau.

Vehicle shift. Choices available to the auto-buying public have grown steadily over time, with vehicles ranging from vans to used cars all competing to some extent with new automobiles for the consumer's dollar. And since the mid 1950s a gradual change in patterns of vehicle ownership—away from passenger cars—has been discernible. In part reflecting this, passenger-car mileage as a percentage of total miles traveled by motor vehicles of all types—cars, motorcycles, buses, trucks, and recreational ve-

(Continued on page 15)

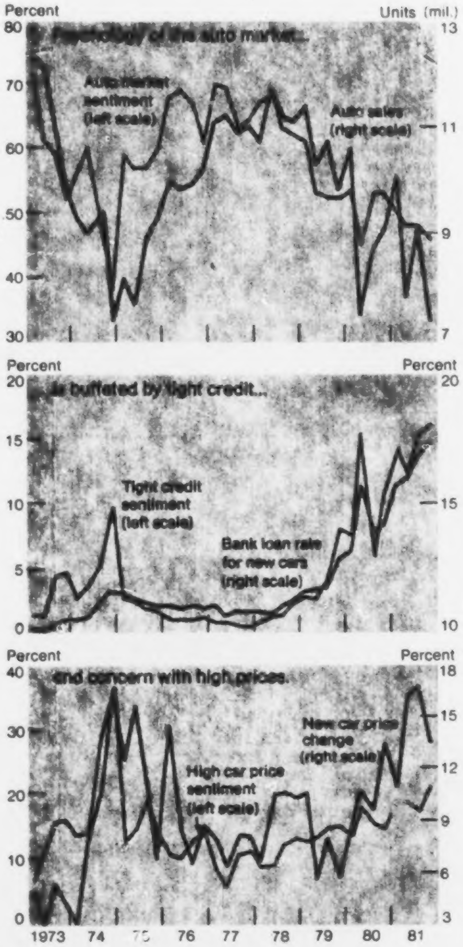
PSYCHOLOGY AND THE AUTO MARKET

ANALYSTS have found that car-buying attitudes—as measured by consumer surveys—can be quite helpful in explaining many of the variations in automobile demand that are not captured by fundamental economic factors such as income, price, and replacement needs. Moreover, since consumers also are queried about reasons behind shifts in car-buying attitudes, surveys such as those conducted by the University of Michigan Survey Research Center are helpful in identifying economic factors that condition the tone of the automobile market.

As the top panel of the accompanying chart shows, broad movements in automobile sales are captured reasonably well by the changing proportion of consumers claiming "it will be a bad time to buy a car in the next year." As to why such attitudes have deteriorated so sharply over the past three years, the surveys point to two key factors—tight auto credit and high car prices.

As the middle panel of the chart indicates, the adverse psychological impact of tight credit tracks movements of interest rates on car loans quite well. Up until 1979 such interest rates were, in large part, fairly stable, but auto loan rates moved up sharply in the aftermath of the Federal Reserve's change in operating procedures in the fall of 1979. Reflective of that change, the tight-credit mentality of consumers has become an increasingly important conditioner of auto-buying psychology.

The psychological perception of changes in auto prices appears, however, to be a more complex phenomenon. Clearly, a variety of factors—such as quality, safety, and repair experience—can influence the psychology of the auto market. As the bottom panel of the chart indicates, recent trends in car prices tell only part of the story.



NOTE: Sentiment data are derived from consumer surveys conducted by the Survey Research Center of the University of Michigan. Auto market sentiment indication is 100 minus the percent of respondents judging it a bad time to buy a car. Tight credit sentiment measures percent of respondents citing tight credit and high interest rates as a factor explaining why it is a bad time to buy a car. High car price sentiment measures percent of respondents citing high prices as a factor explaining why it is a bad time to buy a car. New car price change is year over year percent change of new car prices as measured on a unit value basis by the U.S. Department of Commerce.

hicles–has declined by about six percentage points during the past decade, to 74% in 1980. This gradual trend seems likely to continue.

Moreover, during the Seventies consumers devoted an increasing portion of over-all auto budgets to purchases of used cars–thus further eroding demand for new cars. At the same time, used-car prices–an important barometer of an older model's trade-in potential–moved in a rather volatile fashion. During times of low replacement demand, increases in the value of used cars can provide an important spark to new-car purchases. This was the case in 1976, and the 23% surge in used-car prices during 1981 suggests that new-car sales could be boosted by the increased value of trade-ins.

Population patterns. Demographic trends have played a supportive role in auto-sales growth over the past decade, with the post-World-War-II "baby boom" generation exhibiting a strong penchant for "wheels." In 1980, for instance, the 20-to-34-year-old age group accounted for 38% of total licensed drivers in the United States–up significantly from 34% a decade earlier. But government projections suggest that growth of this key population group will begin to slow in the early part of this decade before coming to a halt in 1990. By that time, however, most baby boomers will have moved into the 35-to-54 age group–which, on a per-household basis, owns the largest number of cars. In short, the positive impact on demand from today's young adults will continue strong for the next decade or so. Indeed, that segment of the population will not even begin to push into the 55-plus age category–when car buying tastes recede–until late in the next decade.

Looking ahead

All in all, there is no single explanation for the extraordinary weakness in auto demand over the past three years. Household budget strains, together with adverse shifts in market psychology and a virtual leveling off of real income, produced a truly inhospitable environment for the auto market in that period. The affordability problem, however, has been mainly an energy-related squeeze which now is easing with the softening in world energy prices. Significantly, such pressures on household budgets would have diminished with just a stabilization of oil prices. The price drop that actually has occurred thus solidifies the prospects for improvement in automobile demand.

Against that background–and considering longer-term fundamentals–it is not unreasonable to suggest that the protracted slump in auto sales is over. But unquestionably there is a sizable element of uncertainty in the outlook. The auto market remains intimately connected to the fortunes of the economy as a whole, and the turbulence that has shaken financial markets since late 1979 has had obvious and far-reaching effects on the mood of the auto-buying public. A continuation of such disorder and uncertainty could offset much of the potential gain from improved auto-demand fundamentals. This critical factor tempers The Morgan Bank's forecast of automobile sales this year and next. Until policies and programs in Washington take a more well-defined course, economic recovery is likely to be exceedingly fragile. That, in turn, must limit any hopes for a strong and sustained improvement in auto demand.

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Business Borrowing. *Despite a recession, corporate demand for short-term credit has been brisk. But that strength is about over. Reasons for the reversal—and why 1982 will see reduced corporate demands on credit markets.* 1

Economy Watch. *It still looks like a moderate upturn this quarter. Reasons why—along with a forecast through yearend.* 3

Friday Follies. *At 4:10 p.m. it's curtain time for "The Money Numbers." Raves—or boos—of reviewers can shake financial markets. Now the Fed is considering changing the script.* 5

Housing's Future. *Don't count on a housing boom. Basic forces suggest only moderate growth through mid-decade. A changed environment for owners, buyers, investors.* 11

Business Borrowing: Set to Decline

A key question for financial markets is the extent to which this recession will reduce corporate borrowing. The most visible measure of corporate borrowing—the total of commercial and industrial bank loans and commercial paper—has continued rising briskly so far. And some market analysts believe that corporate borrowing will not recede much, if at all, in 1982.

By contrast, in a discussion of the outlook for credit markets, this bank argued three months ago that the pace of corporate borrowing would slow in 1982.* And, increasingly, a broad range of factors—inventory liquidation, lower inflation, reduced corporate tax liabilities, and sluggish investment outlays—point to a cyclical decline in corporate borrowing this year. Thus, it is likely that a weakening trend in business borrowing will soon become evident.

Recent data, in fact, suggest that corporate financing requirements—indicated by the gap between retained cash flow and investment expenditures—have already fallen sharply. The major reason for the decline is the sharp swing in inventory investment. Businesses increased inventories by $16 billion in 1981, while in the first quarter of 1982 inventories were reduced at a $40-billion annual rate. With business fixed investment up only moderately, total investment expenditures (inventory and fixed combined) were lower by about $45 billion at an annual rate in the first quarter of 1982 than in 1981.

Corporate profits, of course, have also fallen sharply under the pressure of recession and high interest rates. Indeed, some companies are being forced to increase their borrowing because

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*"Financial Markets in 1982," *The Morgan Guaranty Survey*, February 1982.

Retained Cash Flow

(Billions of dollars at annual rate)

	1980	*1981*	*First qtr. 1982*
Total	186	224	215
Pretax profits	184	185	125
Depreciation	151	176	194
Inventory profits	−46	−28	−11
Tax liability	−63	−59	−37
Dividends	−40	−50	−56

NOTE: Data cover the domestic operations of nonfinancial corporations. First-quarter profit and tax-liability data are estimated by The Morgan Bank.

they are now losing money. In the aggregate, however, the effect of lower profits on cash flow has been offset importantly by the decline in the rate of inflation and by the corporate tax cuts implemented last year. A portion of the drop in profits has been nothing more than a fall-off in the level of inventory profits caused by the deceleration in inflation. Such earnings are not available to fund investment expenditures—they are needed simply to replace existing inventories at higher prices—and, in addition, they generate tax liability. In short, a portion of the drop in profits has been offset by an increase in the "quality" of corporate earnings.

A further boost to cash flow has come from the corporate tax cuts that were implemented through increased depreciation allowances. Although the higher depreciation allowances have not boosted reported earnings, they have added to retained cash flow by reducing tax liabilities. When all these factors are combined, retained cash flow in the first quarter of 1982 was down only some $9 billion from its average in 1981 (table on this page). Consequently, financing requirements have fallen by about $35 billion.

The failure of short-term business borrowing to slow in line with the reduction in financing requirements appears to be explained by three factors. The first is reduced bond issuance: nonfinancial corporations sold bonds at a $22-billion annual rate in the first quarter of 1982, down from $32 billion last year.* Presumably, companies were reacting to the escalation of bond rates in January by reducing bond issuance and increasing short-term borrowing.

The second, and probably more important, explanation is the pattern of actual corporate tax payments. Despite the sharp drop in corporate profits, the volume of corporate tax payments has until recently been very strong. In the fourth quarter of last year, tax payments by nonfinancial corporations were actually above year-earlier levels—despite a drop in accrued tax liabilities of over $20 billion (at an annual rate). In the first two months of 1982, this pattern continued. Profits and tax accruals declined, but tax payments to the Treasury were actually up from year-earlier levels.†

Tax payments, however, began to weaken in March, and this weakness appears to have continued in April. In addition, corporate refunds are running ahead of last year—suggesting overpayment of 1981 liabilities. Refunds are likely to be particularly large in the current quarter when firms settle their 1981 tax positions. (Heavy tax payments by firms help explain why the federal deficit barely rose between the first half of fiscal 1981 and the comparable 1982 period. A reversal of tax payments in the second quarter will tend to raise the deficit.)

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*These figures cover issues sold by U.S. nonfinancial corporations in the Eurobond market and in the U.S. public market.

†One reason for the continued strength in corporate tax payments is simply that payments normally tend to lag behind swings in profits. In addition, the increase from 12% to 20% in the penalty charged on late payments may have speeded remittances, and a tax-law change that tightened requirements for large corporations making quarterly payments may have boosted receipts in the early part of the year.

A third factor that may well have contributed to first-quarter corporate borrowing is liquidity-building. Faced with heightened uncertainty about the economy and financial-market conditions, many firms seem likely to have taken advantage of their reduced financing requirements to build liquidity. This would mirror developments in 1975 when corporate financing requirements also fell quite sharply in recession's aftermath, and companies more than tripled their accumulation of liquid assets. Actual borrowing did fall off in that situation, but much less than the decline in what firms needed to finance investments and working capital.

In coming months, if The Morgan Bank's economic forecast is on target (article below), corporate borrowing is likely to be declining. Continued inventory reductions and declining capital spending, combined with the beneficial effect of essentially stable producer prices, should hold financing needs at relatively low levels. In addition, tax payments will be falling, further reducing borrowing needs.

Actual borrowing may decline somewhat less than these factors suggest, owing to corporate liquidity-building. However, liquidity-building does not absorb the economy's credit-granting capacity since the liquid assets which companies acquire—such as Treasury bills and commercial paper—provide financing to other sectors of the economy. Thus 1982 is likely to see corporate demands on credit markets much reduced.

Economy Watch

PROSPECTS continue to favor a moderate upturn in the current quarter. This seems reasonable to expect simply because the drawdown of business inventories is likely to be less severe than the record rate of liquidation in the first quarter. As the rate of inventory reduction is diminished, production and employment levels rise—adding to incomes and fueling a more broadly based expansion. However, that argument for a turnaround as yet has very little tangible support. The continued paring of payrolls—indicated by the 0.2% drop in employment in April—suggests that businesses are not yet anticipating any improvement in sales. Indeed, lackluster sales by chain stores last month indicated that the broad retail sector lost some seasonal business at Easter because of bad weather.

Nevertheless, The Morgan Bank forecasts that "real" GNP in the current quarter will rise at a 1.2% annual rate (table on page 4). Added momentum is expected in July when consumer ability to spend will be boosted by the $30-billion (annual rate) cut in personal taxes and by the $11-billion increase at an annual rate in Social Security benefits.

The outlook for business investment is less promising. Plant-and-equipment spending continues to decline under the weight of excess capacity, weak sales, high interest rates, and declining profits. Nor is there reason to expect much, if any, improvement during the rest of the year. New orders for capital goods rose slightly in March, but from a very depressed level. Moreover, the Commerce Department's latest survey of businessmen's capital-spending plans indicates an outright drop in real investment spending for the year as a whole.

Lessened inflation remains the major bright spot. Both the producer price index and the CPI declined in March, the second straight month of decline for the producer price index. The chief reason for the declines was the sharp drop in oil prices. But a drop in food prices, house prices and mortgage rates (in the case of the CPI), together with a broadly based deceleration in the rate of increase in prices of other goods and services, also contributed to the abatement in the inflation pace.

Some of these influences are temporary. A slight backing-up of oil prices during the second half of the year is expected to push the rate of increase in the over-all price indexes up to an annual rate of around 6% from the current near-zero rate of inflation.

But more important than these short-term fluctuations is the dramatic reduction that has occurred in fundamental inflation pressures. The lows reached near the current business-cycle trough for all of the major price indexes (either in total or excluding the more volatile components such as oil, food, or mortgage rates) almost certainly will fall below the lows recorded during the last cycle in 1975-76. This will be the first time since the 1950s that such a downward, rather than upward, ratcheting of the inflation rate has occurred.

Despite the soft economy and the improved inflation outlook, the monetary aggregates (M1 and M2 considered together) still cannot be regarded as performing satisfactorily relative to the desired paths targeted by the Fed. The Fed has consequently tended to be restrictive in supplying reserves to the banking system. The level of nonborrowed reserves has been virtually constant for the past two months. However, because required reserves increased in the wake of the sharp jump in M1 in early April, the result was an increase on average during April in the level of borrowings from the discount window and some upward pressure on the Federal funds rate. Pressure on the funds rate has since subsideded somewhat, reflective of a moderate increase in reserves availability.

The chance of a substantially lower funds rate emerging soon would seem to depend on how the monetary aggregates evolve over the remainder of the spring. On balance, the odds do seem to favor some downward movement in interest rates in the months ahead, given the combination of a low level of economic activity and of much improved price performance.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1981	*1982*			
	Q4	*Q1*	*Q2*	*Q3*	*Q4*
Real GNP	−4.5	−3.9	1.2	3.3	3.1
Real consumer spending	−2.2	4.0	1.5	3.5	3.6
Real business-capital outlays	−2.9	−0.7	−10.1	−2.1	0.6
GNP deflator	9.5	3.6	5.1	6.4	7.1
Consumer prices	7.8	3.2	1.2	6.4	6.5
Real disposable personal income	1.7	0.2	3.4	9.4	1.8
Saving rate (%)	6.1	5.3	5.1	6.0	5.6
Housing starts (Millions)	0.9	0.9	1.0	1.1	1.2
Auto sales (Millions)	7.4	8.3	8.0	8.8	9.1
Unemployment rate (%)	8.4	8.8	9.4	9.4	9.4

NOTE: 1981 Q4 and 1982 Q1 data are actual. Approximately one percentage point of the rise in the GNP deflator in the fourth quarters of both years reflects the timing of federal pay increases.

Behind the Weekly Money Numbers

EACH Friday afternoon in trading rooms around the U.S. the buying and selling of financial instruments typically slows almost to a halt. Thousands of market participants move to the sidelines to await the release (promptly at 4:10 New York time) of a report from the Federal Reserve containing an array of monetary statistics, the focus of which is the average level of the narrow measure of money (M1)* in the seven days ended Wednesday of the previous week. Indeed, interest in this report is not confined to the U.S. In Europe, for example, traders are known to go back to their offices after dinner to wait for the numbers.

The moment the figures come over the news wires, trading rooms again come to life. During the next few minutes, hundreds of millions of dollars of government securities may change hands at prices substantially different from those which prevailed before the Fed's announcement. Over the weekend, the money data will be scrutinized by analysts searching for clues to the future course of interest rates. When the commodity, foreign exchange, and stock markets open on Monday, prices in those markets too may react sharply to the money numbers. And while all of these price movements may have reversed themselves before the end of that day, the markets by then will already have begun to focus on the next Friday's numbers—which a large band of analysts will be attempting to forecast (box on p. 8).

This pattern of weekly activity is a relatively recent phenomenon. Its development, not surprisingly, has paralleled the Federal Reserve's increasing focus on the goal of controlling the monetary aggregates, which has brought sharp swings in interest rates. The substantially increased volatility in interest rates over the past two and a half years has made dealing in financial assets a much more risky business. And larger risk premiums may in turn be one of the factors keeping interest rates so high.

The Federal Reserve for its part has repeatedly warned market participants that the weekly money data are inherently volatile, and that making financial commitments on the basis of one week's number is imprudent. Participants typically respond that, with monetary policy tied so closely to controlling the monetary aggregates, markets will inevitably react strongly to each week's data. Market participants, moreover, will have an incentive to allocate substantial resources to forecasting the weekly numbers.

The Fed, in a further effort to play down the significance of the weekly data, has tentatively decided to change its reporting procedures. In place of the weekly, seasonally adjusted M1 number, the Fed would report a seasonally adjusted four-week moving average of M1. (The Fed would continue to report weekly data on a nonseasonally adjusted basis.) Had the four-week procedure been followed in 1981, the reported movements in money would have been much more moderate (chart on page 6).*

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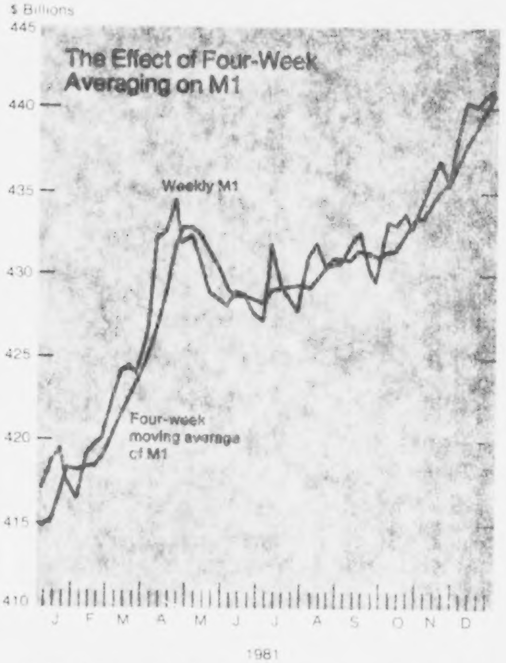
*M1 consists of currency in the hands of the public plus checkable deposits at depository institutions.

*The chart actually depicts four-week averages of the seasonally adjusted data. The Fed proposal is to form four-week averages of the unadjusted data and then apply seasonal factors derived specifically for these averages. Presumably, the results would be very similar. But were the Fed first to calculate weekly seasonally adjusted figures and then to average them, it might be legally bound to release the individual weekly data under the terms of the Freedom of Information Act. Since the Fed has in fact already published the weekly seasonal factors it intends to use for 1982, the market will be able to calculate seasonally adjusted weekly numbers for the remainder of this year, marring somewhat the debut of the new procedure.



NOTE The average plotted for any given week is based on data for that week and the preceding three weeks. All data are seasonally adjusted.

To the extent that the Fed's Friday afternoon release typically would report less dramatic changes on a four-week basis, the markets' reaction would hopefully be more measured. But much would depend on whether the markets perceived the Fed to be basing policy on the four-week averages. Moreover, it would still make sense for market analysts to dissect the Friday report—which presumably would still contain a wealth of detail on the components of the money stock—in order to detect emerging trends in money growth and, hence, to anticipate future Fed actions.

With so much attention paid to the weekly money numbers and so many financial decisions influenced by them, surprisingly little has been written in the financial press about the underlying data themselves: e.g., how the estimates of the aggregates are actually constructed and how the process of seasonal adjustment is implemented. Yet an appreciation of these matters would seem to be a prerequisite to any assessment of the reliability of the data, and hence to a determination of how heavily to discount any one week's numbers. The conclusion which emerges from an examination of these issues is that the quality of the data is in certain fundamental ways far superior now to what it was even a year or two ago. Yet, despite this improvement, the problems of deriving adequate seasonal adjustment factors for weekly money numbers are great enough that a good case can be made in support of ending publication of the weekly seasonally adjusted data.

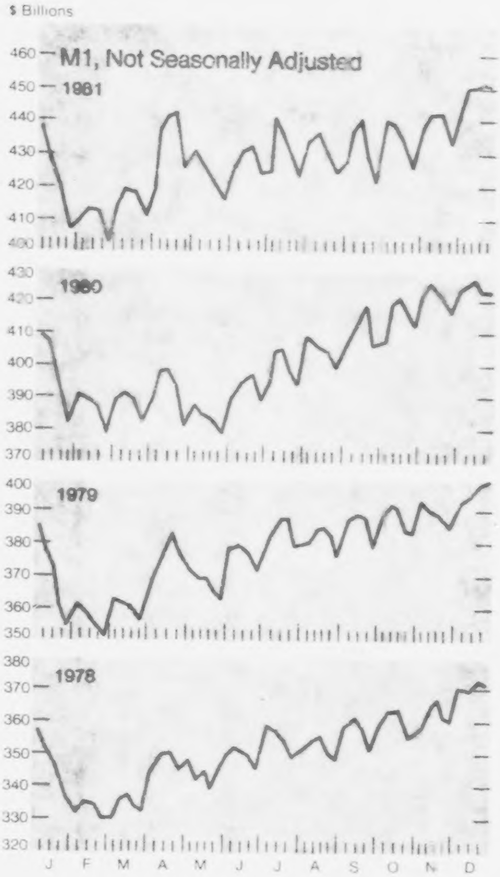
Whether the Fed can construct acceptable seasonal factors for moving four-week averages of M1, and whether the market reaction to their publication will have any appreciable impact on interest-rate volatility, are questions whose answers are not yet clear.

The long road to M1

The narrow money supply is usually described as currency in the hands of the nonbank public plus checkable deposits at depository institutions. While that definition may not seem terribly concise, it is downright laconic compared with the full official description of M1: currency outside the Treasury, Federal Reserve Banks, and the vaults of commercial banks; travelers' checks of nonbank issuers; demand deposits at all commercial banks other than those due to domestic banks, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float; and other checkable deposits, consisting of negotiable order of withdrawal and automatic transfer service accounts at banks and thrift institutions, credit union share draft accounts, and demand deposits at thrift institutions. Conceptually, this definition represents an attempt by the Fed to measure transactions balances which the private sector has available for immediate spending.

The exact definition of M1 has varied somewhat over the years as new types of deposits have been developed (e.g., NOW accounts) and as nonbank institutions such as the thrifts have been permitted to offer checkable deposits. Even so, the Fed has always had to make comparable adjustments to the basic currency and deposit data in order to arrive at its weekly estimate of the money stock. And in the past, it was indeed an "estimate," since before passage of the Monetary Control Act of 1980 the Fed received deposit data on a weekly basis only from member banks, which collectively accounted for about 70% of the deposits contained in M1. Nonmember banks reported only once a quarter. In between quarterly "call reports," the Fed extrapolated total deposits on the basis of data from its weekly reporting members, with the result that substantial revisions to the weekly data typically were made after each call report was processed.

The greatly expanded reporting requirements mandated by the Monetary Control Act have changed this situation dramatically. Now all depository institutions with over $15 million in transactions or nonpersonal time deposits must report to the Fed each week. Institutions with from $2 million to $15 million of such deposits report once a quarter, but on a staggered basis, so that the Fed receives data from a carefully constructed sample of these institutions every week. As a result of these changes, the Fed now has reasonably firm weekly data on about 95% of the deposits in M1.



Indeed, apart from a few relatively minor items,* almost all of the information needed to construct the deposit component of M1 is contained in the weekly reports of deposit filed with the regional Federal Reserve Banks each Friday for the statement week ended two days earlier. The Reserve Banks edit and compile the information and transmit it to the Board of

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*These items are deposits due to foreign banks and official institutions, nonbank travelers' checks (for which data are reported monthly), and the very small adjustments made to currency and demand deposits to reflect the holdings of thrift institutions to service their other checkable deposit liabilities.

WEEKLY CHANGES IN M1: FORECAST VS. ACTUAL

NOT surprisingly, market reaction to the weekly money numbers depends on how closely the official figures coincide with market expectations. Thus, the market was not fazed by the report of a huge $7.1-billion increase in M1 during the first week of April, since a large jump in the money supply had been widely anticipated.

Expectations of a sharp rise in M1 were based in part on the fact that large gains in that aggregate were recorded at the start of April in four of the past five years. This so-called April bulge is perhaps the best known example of a failure of the Fed's adjustment factors fully to compensate for seasonal variations in money holdings. Analysts naturally have tried to exploit the residual seasonality in M1 in their forecasting efforts. These attempts range from simple extrapolations of how M1 behaved in the corresponding week in previous years to formal statistical studies aimed at identifying recurring patterns in the data.

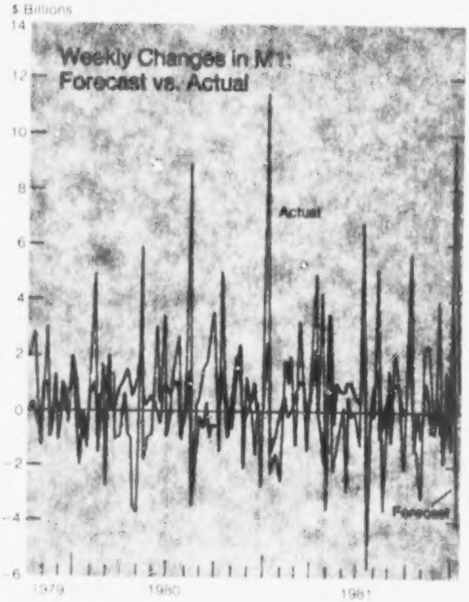
An alternative to forecasting M1 on the basis of its own past behavior is to try to find stable relationships linking that aggregate to past values of other variables which economic theory suggests should condition money growth—e.g., the monetary base (which consists essentially of currency plus bank reserves) and short-term interest rates. However, since these relationships tend to be extremely loose, especially for weekly data, this approach is frequently used in conjunction with the essentially chartist analysis described above. Moreover, the search for variables on which to base money forecasts tends to be guided more by the principle, "If it works, use it," than by any standards of rigorous analysis. The problem with such pragmatism is that it tends to produce forecasting techniques which work well for a brief period and then fall apart. For example several years ago, movements in "float" were hailed as the key to projecting changes in M1. Soon thereafter, however, forecasts based on float sank from sight and have not resurfaced since.

In any one week, of course, analysts pursuing a variety of forecasting techniques (including simply the observance of what the Fed does in its daily operations and the resulting level of the funds rate) will generate a range of projections for that Friday's M1 number. These alternative views tend to get widely disseminated throughout the financial markets. And since no one forecaster has clearly established an ability to call M1 reasonably accurately over an extended period of time, market participants presumably look at the broad range of projections in forming their own expectations as to what Friday's figures will likely be.

For several years now, the San Francisco firm of Money Market Services, Inc. has conducted weekly surveys of securities dealers and recorded the dealer forecasts of that week's change in M1. The median of those forecasts may be taken as a proxy for "the market forecast." The accompanying chart gives some idea of how well the market has been able to anticipate the week-to-week changes in M1 over the past two and a half years.

Although the errors have frequently been sub-

Governors on Tuesday night of the next week. Further editing and adjusting must be done to prepare for the release of the money numbers at the end of that week. But by Wednesday morning, the Board has a reasonably good feel for the M1 figure to be made public that Friday. And because of the nearly universal reporting requirements now in effect, that figure is much less likely to undergo significant subsequent revision than was typical before 1980. In fact, the recent "benchmark" revisions to the 1981 numbers consisted virtually entirely of



NOTE Actual M1 data are those reported initially and do not reflect subsequent revisions. The forecast series represents the median forecast of dealers in U.S. government securities as compiled by Money Market Services Inc., San Francisco.

stantial, that should not be surprising given the degree of volatility in M1 over the period. In fact, what is perhaps most striking about the chart is the ability of market participants accurately to foresee the timing of practically all of the very large moves in M1. However, they have typically underestimated the extent of these swings, by as much as $9 billion in one instance. Thus, the market's success in forecasting M1 has been modest at best.

changes in the seasonal adjustment factors rather than of changes in the underlying data.

Seasonal adjustment long has been a focus of research by the Fed's staff, and the Fed was among the first government agencies regularly to report data in seasonally adjusted form. A report by a committee of experts on seasonal adjustment techniques,* published last June, has stimulated new efforts in this area at the Fed. But improvements in the process of seasonal adjustment of weekly data are not as easily effected as gains in data collection, and the issues are extremely complex.

The basic concept of seasonal adjustment is straightforward enough, however, and easily illustrated. If the public's money holdings tend to rise and fall in a regular way at certain times of the year, then seasonal adjustment techniques may be applied to remove these predictable ups and downs. For example, around Thanksgiving every year individuals tend to build up their transactions balances in anticipation of holiday spending. It is important for the formulation of monetary policy that the Fed be able to determine whether the observed buildup at this time of year is about what would be expected on the basis of past patterns. Indeed, one of the reasons for establishing the Federal Reserve was to insure that the money supply would "meet the needs of trade," and those needs have a distinct seasonality to them, as can be seen in the tiered chart on page 7.

But although seasonal movements in the money stock are clearly present, it is far from obvious exactly how they can be removed to produce properly adjusted data. In fact, the derivation of seasonal-adjustment techniques draws on some of the most arcane aspects of statistical theory. The basic procedure currently used by the Fed (and generally by all government agencies) is known as the X-11 method. It is essentially a way of breaking any series into three components: a trend (including cyclical movements), a seasonal factor, and an "irregular factor"—i.e., whatever is left over once the trend and seasonal are accounted for. The seasonal factors which ultimately emerge are in effect weighted averages of past observations, with the most recent years receiving the greatest weight.

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*Seasonal Adjustments of the Monetary Aggregates, Board of Governors of the Federal Reserve System, Washington, D.C.

The X-11 procedure is designed to be used with monthly or quarterly data. The Fed uses it to derive monthly seasonals, from which Fed analysts then construct weekly seasonals. In doing so, they cannot rely solely on a mechanistic computer program, since judgmental adjustments must be introduced in order to account for such vagaries as holidays which appear in different weeks from year to year.*

In fact, an argument can be made that greater reliance should be placed on judgment as opposed to formal statistical procedures in deriving weekly seasonals. The persistence of such phenomena as a large bulge in M1 in early April suggests that current procedures leave a large residual amount of seasonality in the data. But given the tremendous political sensitivity of economic data, there is much to be said for maintaining a "hands-off" system of seasonal adjustments as much as possible.

Potential conflict

The Fed is currently exploring some techniques recommended in the report of the committee of experts, and one of these procedures is being used on an experimental basis this year. But a basic conflict is likely to remain: a need to apply judgment liberally to arrive at adequate weekly seasonals while at the same time avoiding any appearance of manipulating the data for political purposes. In view of this, the Fed's tentative decision not to calculate weekly seasonals seems reasonable.

The market is, of course, fully capable of estimating weekly seasonals on its own. Whether it proves worthwhile to do so will depend on the perceived behavior of the Fed. The more the Fed appears to base its policy actions on the seasonally adjusted four-week averages, the more the market will focus on these numbers. That raises the larger question of what the appropriate variable is for the Fed to target.

After all, the reason the monetary aggregates are of interest to economists and policy makers is that money growth is believed to convey information about economic activity, either current or prospective. There is ample evidence that money growth and GNP growth are closely related over periods of six months to a year—though the relationship has a good deal of slippage to it and has shown signs of shifting over time, at least in the case of M1. But no one would maintain that money growth in a given week tells anything about what was happening to the economy in that week.

A four-week average of M1 is unlikely to convey much more information about the economy than one week's data can, but a shift on the part of the Fed to publishing seasonally adjusted money data on a four-week basis would underscore the fact that the appropriate focus for money targeting should be a longer interval. And if, by denying markets the drama of very large one-week changes in M1, the Fed's shift were to help reduce the volatility of interest rates, that would be a welcome development.

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*As a rule, the Fed constrains its weekly seasonals over the course of any month to be consistent with the respective monthly seasonal based on X-11.

Housing's Next Five Years

THE Seventies, over all, were the strongest decade for U.S. housing activity in history. New homes, apartments, and mobile units went up on average at a rate of better than 2 million annually. But the Seventies also were a time of extreme volatility for housing—with record-high production rates of the early years cut in half as a result of financial turbulence at mid-decade. Similarly, the impressive recovery in housing activity late in the Seventies came to an abrupt end as the decade closed.

Housing, some two years later, remains in a severe slump, brought on by 17% mortgage rates that have priced hundreds of thousands of potential buyers out of the market (box on page 12). Housing starts last year barely topped a million: the lowest level since World War II. Real estate prices—which had been rising steeply—now are only creeping upward. And in many areas houses remain on the market for long periods, despite drastic price reductions by desperate sellers.

What's ahead for housing into the mid-Eighties? A continuation of the squeeze? Or a return to the generally prosperous conditions of the Seventies?

Some industry analysts anticipate a return to the climate of the Seventies, with housing starts as high as 2 million a year. Add in mobile homes and the annual total could reach a record high of 2½ million new units. Such a boom, it is forecast, will be fed by a backlog of demand, by lower mortgage rates, and by the housing needs of a growing population.

It could turn out that way, of course. But this bank's analysis of the basic forces at work in the housing market—ranging from the mortgage outlook to population patterns—suggests that housing activity seems more likely to show only a moderate improvement from currently depressed levels. Indeed, housing prospects in the Eighties appear to have undergone a significant change compared with the Seventies—with major implications for home owners, home buyers, investors, and the building industry.

A case for caution

During the 1970s, a rapidly growing adult population formed new households at a high rate, spurred in part by the availability of comparatively cheap housing. Allowing for the rise in property values, in fact, owners typically lived in their houses "for free" during most of the decade—since appreciation in house prices usually exceeded financing costs. Tenants also benefited. The "real" price of rents—i.e., rents relative to over-all consumer prices—fell about 20%, partly reflecting competition from home ownership at relatively low carrying costs.

During the 1980s, the adult population will continue to grow rapidly—thus enlarging the potential for new housing construction. A key question, however, is whether recent changes in the economics of home ownership have impaired people's ability to set up their own households. Among the major considerations:

- What happens to mortgage rates, of course, will be crucial. With inflation abating, it seems improbable that mortgage rates will persist as high as 17% indefinitely. But it would appear unwise as yet to count on a decline to the 8% to 9% average that prevailed during the Seventies. The formidable budget problem that looms ahead for several years argues against that. So too do the high interest-rate premiums that investors have come to demand because of financial-market volatility. Another reason for

MORTGAGE RATES AND AFFORDABILITY

THE vast majority of American families are priced out of the housing market at today's mortgage rates. Only about one household in five has the income needed to carry a median-priced ($68,000) new home at current 17% mortgage rates—using the rule of thumb that payments of principal and interest not exceed 25% of gross income.*

The affordability problem obviously would ease if mortgage rates dropped significantly. However, even if mortgage rates fell, say, to 14%—a level that many analysts believe would stimulate strong new demand for home ownership—fewer than one in three households would have the income to carry a median-priced house. Mortgage rates would have to decline to 10% before roughly half of American households were in a position to take on payments for a median-priced house—a situation that last prevailed back in the mid-Seventies.

Mortgage rates that low, of course, cannot be ruled out in the course of the next few years. But to get such a decline, there would have to be significant and enduring downward pressure on the rate of inflation—a forecast that cannot yet be made with confidence. At least until such time as the long-term inflation outlook becomes more settled, a working assumption that mortgage rates will remain high by historical standards seems appropriate. This implies that lack of affordability will continue to be a major dampener of demand for new homes.

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*This calculation further assumes that the amount of the mortgage not exceed 75% of the purchase price of the house.

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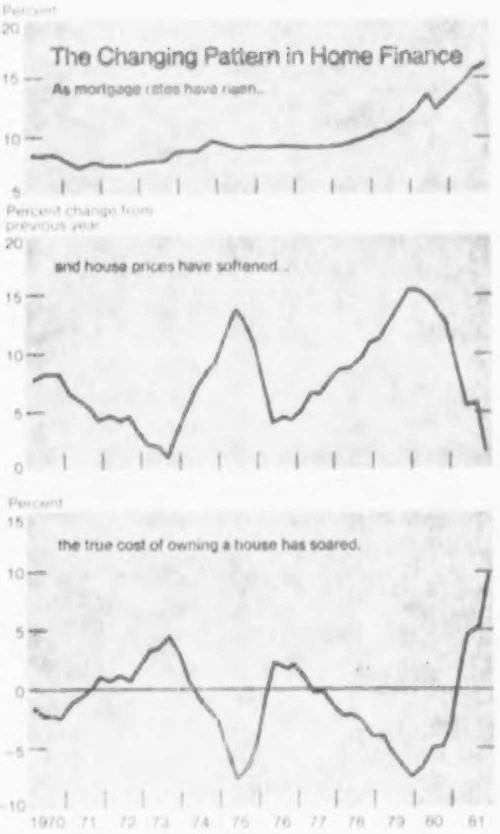
thinking that mortgage rates will remain high is the phasing out of Regulation Q, which controls the rates that thrift institutions (the main source of home-mortgage credit) can pay on deposits. As a result, the cost of funds faced by the thrifts increasingly is reflecting open-market rates—ending the subsidy to mortgage borrowers extracted from savers by regulation.

- Because of uncertainty over future interest-rate levels, lenders are reluctant to extend fixed-rate mortgages. Thrifts in particular, with short-term deposits their major source of funds, now mainly offer variable-rate mortgages. Thus the interest-rate uncertainty, long borne by lenders, is being passed on to borrowers. Under variable rates, moreover, if inflation quickens and interest rates rise accordingly, any appreciation in house prices will be captured by suppliers of mortgage credit rather than by home owners.

- With the high cost of mortgage credit, owners eager to sell their houses increasingly have had to extend short-term financing—usually for several years and at below-market interest rates—to buyers. Last year, about 60% of sales of existing homes entailed such "creative" financing. This trend has caused concern about the cost at which permanent financing will be available from traditional mortgage lenders when the short-term loans mature. Another concern is whether owners' need to provide financing, and their resulting inability to recover capital, will tend to make housing less attractive as an investment. Given the mortgage climate in prospect, sellers doubtless will have to continue to provide financing for some time to come.

- As buyers' financing costs—and the risk of taking on mortgage debt—have risen, the rate of increase in house prices has slowed almost to a halt. The true cost of owning a house thus has surged (chart on page 13). Unlike the situ-



The Changing Pattern in Home Finance

As mortgage rates have risen...

and house prices have softened...

the true cost of owning a house has soared.

NOTE The cost shown in the bottom panel is after tax and is based on an assumed marginal tax rate of 30%.

ation during the Seventies, prospective buyers in the Eighties no longer can expect virtually automatic profits from home ownership.

Separate households

In addition to changes in the economics of housing, any assessment of the longer-run outlook for building activity needs to take account of demographic factors behind demand for new dwelling units. Besides growth of the adult population and its age distribution, a critical factor is the propensity of each age group to form separate households. The last of these is measured by so-called headship rates (the ratio of the number of heads of household to the number of adults in each age group) and is a main conundrum in the housing outlook.

In the past decade, headship rates rose significantly in all age groups—with particularly large increases occurring among younger and older people. In 1981, for example, 492 out of 1,000 persons between the ages of 25 and 29 headed a household—45 more than in 1971.

Rising prosperity and greater job opportunities for women—along with relatively low housing costs—helped many younger adults to establish separate households. At the same time, sharply higher Social Security benefits permitted many more older people to keep their own households after retirement. In addition, rising divorce rates and the premium that both young and old people apparently have put on being independent from other family members helped account for higher headship rates. Significantly, of the total increase in households in the 1970s, some 45% were formed by persons living alone; another 20% were formed by unmarried women heading families.

Higher headship rates exerted an important influence on demand for housing during the Seventies. As the table on page 14 shows, they accounted for about 30% of the over-all growth in households. The remainder was due to increases in the adult population. The change in age distribution, because it shifted toward younger groups with relatively low headship rates, actually tended to hold demand for new housing slightly below what it otherwise would have been.

During the early 1980s, in contrast, with more and more of the "baby-boom" generation coming into their thirties, the change in age

Growth in Households

(Millions)

	1971-76	1976-81	1981-86 Worst case*	 Best case†
Due to increase in the adult population	5.9	6.7	5.8	5.8
Due to change in the age distribution of the adult population	−0.2	−0.1	0.8	0.8
Due to higher headship rates	2.4	2.8	0.0	3.3
Total	8.1	9.5	6.5	9.8
Average per year	1.6	1.9	1.3	2.0

*Assuming headship rates (ratio of the number of heads of household to the number of adults in each age group) are unchanged.

†Assuming headship rates increase in line with the experience of the past ten years.

distribution should add to demand for housing. Moreover, as noted, growth of the adult population will continue at a brisk pace—although, as the table shows, the pace will be somewhat below that of the Seventies.

The key question is how headship rates will evolve. In all probability, they will be at least as high five years from now as in 1981. That assumption, a conservative one, can provide a "worst-case" boundary. At the other extreme, an extrapolation of the increase in headship rates of the past decade provides a "best-case" boundary. Given these assumptions, the total number of new households formed over the next five years could range from 6.5 million to 9.8 million—or between 1.3 million and 2.0 million a year. A more realistic assumption, however, probably is that headship rates in the next few years will continue to increase but at a slower pace than in the Seventies—since housing markets presumably will not present the uniquely favorable combination of relatively cheap credit and rapidly rising home prices that made housing such a "buy" in the Seventies.

Whether on a worst- or best-case assumption, a bulge will occur during the early Eighties in the number of households headed by people in the 30-34 and 35-44 age groups. This should give a lift to demand for single-family units—the dwellings preferred by household heads in their thirties and forties. However, the high cost of home ownership may limit the ability of people in those age groups to buy their own houses. Alternatively, if the cost does not deflect people into rental units or mobile homes, it may cause buyers to accept less house per family.

Removals and replacements

A final consideration in assessing needs for new housing production during the early Eighties is the number of dwellings likely to be removed from the housing stock (owing to demolitions, fires, floods). In recent years, significantly, net removals appear to have been minimal. Though no recent data on removals are available, that inference seems warranted because new housing production and growth in households both totaled some 9½ million units during the 1976-81 period (table on page 15). Apparently, removals from the housing stock have been offset by additions of living units that had been rehabilitated or converted from other uses—e.g., factories and lofts.

A trend toward conversion and rehabilitation is supported by data from the Annual Housing Survey conducted by the Bureau of the Census. These indicate that during the period from 1976 to 1979, the latest year for which data are available, an estimated 2.2 million housing units were lost to the stock. But additions to the stock from existing structures totaled 2.0 million units, offsetting almost all of the losses.

Housing Production and Need

(Millions of units)

	1971-76	*1976-81*	*1981-86* *Worst case**	*Best case†*
Production				
Conventional units	8.8	8.2		
Mobile homes	2.1	1.3		
Total	10.9	9.5		
Need				
Resulting from new households	8.1	9.5	6.5	9.8
Resulting from other factors, mainly net removals	2.8	0	0.5	1.4
Total	10.9	9.5	7.0	11.2
Average per year	2.2	1.9	1.4	2.2

*Assuming headship rates (ratio of the number of heads of household to the number of adults in each age group) are unchanged.

†Assuming headship rates increase in line with the experience of the past ten years.

Efforts to fix up existing buildings partly reflected the availability during the late 1970s of federal rehabilitation loans and community development block grants. About 25% of those grants were used for rehabilitating housing units that otherwise would have been lost to the stock. Beyond that, the economics of refitting older homes and nonresidential buildings such as factories and lofts have been favorable. With land and construction costs rising sharply during the late Seventies, it generally has been cheaper to maintain and upgrade existing structures than to acquire a new site and build from scratch. Moreover, declining household size and the increased cost of energy presumably have contributed to the rationale for converting large older buildings near central cities into smaller units. If this trend toward conversion and rehabilitation continues, it seems likely that much of the increased demand for housing during the early Eighties can be satisfied without new production.

Five-year forecast

All in all, new housing output in the five-year period 1981 to 1986 should range between 7.0 million and 11.2 million units, or 1.4 million to 2.2 million units per year, including mobile homes (table on this page). Prospective housing needs could be satisfied by an average rate of housing starts as low as 1.1 million units, supplemented by some 300,000 mobile homes. Alternatively, using best-case assumptions, housing starts at an annual rate of about 1.8 million units, and mobile home shipments of some 400,000 units, would be needed in order to satisfy prospective demand. Such a split between mobile homes and conventional units, to be sure, is arbitrary. But it is consistent with the roughly 20% share of production accounted for by mobile homes in the past ten years.

It is unlikely that all the worst-case or best-case assumptions will be realized. For the best-case scenario to come about, a dramatic, permanent improvement in inflation would almost certainly be required. That development, however, cannot be counted on any time soon. What seems most probable, assuming continuation of relatively high mortgage rates, is a mid-range outcome—with housing starts at something like 1.4 million or 1.5 million units per year. While this would surely be an improvement over the recent level of starts, it also would be far below the optimistic assessment advanced by some housing analysts.

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Credit Problems. *Rising bankruptcies . . . downgraded bond ratings . . . troubled thrifts—the risks mount. But gloom and doom may be exaggerated. Putting problems in perspective.* 1

Economy Watch. *Look for a recovery in coming months—though it will be weak by past standards. Latest projections, sector by sector.* 6

Power Producers. *Electric utilities have made gains recently. But that hard-hit industry has a long way to go. A major need: improved regulation. Progress made, problems ahead.* 10

Monetary Indicators. 15

Credit Difficulties: A Need for Perspective

EVIDENCE that credit risks have increased has led to gloomy talk about a pending economic collapse like the one that occurred in the 1930s. Such concern needs to be balanced by some perspective.

The last three years of virtually flat economic activity and high interest rates have placed corporate balance sheets under considerable strain. Added corporate casualties seem likely, and the extent of future problems is difficult to foresee. It is possible that there will be some unexpected failure which will lead to a period of disruption in financial markets such as took place in 1970, when Penn Central Transportation Company failed. Indeed, the recent problems involving Drysdale Government Securities Inc.—even though their aftereffects were well contained—were a vivid reminder of such possibilities. But the financial system in the current period shows considerable strength. So far there is no evidence that the problems of individual firms will build to a crisis for the financial system as a whole.

Of course, a considerable degree of international credit risk is present in financial markets today, with respect to both corporate and certain sovereign borrowers. However, large commercial banks have had relatively good experiences with problem loans over all—both domestic and foreign—so far in the current recession (nonperforming loans at large banks are shown in the table on page 2). Loans designated as nonperforming rose again at many large U.S. commercial banks in the first quarter of 1982. Nevertheless, the relative amount of problem loans is roughly one third that which the banks worked off following the 1974-75 recession.

In essence, today's domestic credit difficulties attest to the fact that disinflation has its painful side. Many businesses continue to find that revenues are outpaced by costs as wage rates rise more rapidly than selling prices. This forces adjustments that are likely to improve productivity and profitability in the long run, although the weakest companies in hard-hit industrial areas may be driven into mergers or out of business. Encouragingly, more and more companies are lowering their break-even point—a clear indication of improved efficiency.

Credit-quality problems—present and potential—are not difficult to find, but they must be put into perspective:

Bankruptcies. The rate of business failures has risen sharply. Last year, according to Dun & Bradstreet, more than 17,000 nonfinancial companies failed, up 45% from 1980 and more than double the number failing in 1979. In the first four months of 1982, moreover, business failures ran at more than a 23,000 annual rate. These recent failure rates are far higher than the 11,400 figure for 1975—the peak failure year of the 1974-75 recession.

The bankruptcy rate, at latest count, is estimated at 80 per 10,000 companies, compared with 43 in 1975. Unlike the 1974-75 period, when failures were largely confined to real-estate companies, current failures are spread through a broad range of business and industry. While higher than at any time since World War II ended, the current failure rate compares with some 100 per 10,000 in the booming 1920s and with 154 at the depths of the Depression in 1932.

Credit ratings. Bankruptcy data give no insights into the degree of difficulty experienced by companies that haven't failed and are still in normal operation. For larger companies, one such indication can be found in the quality ratings of their long-term debt. The rating agencies collect a vast amount of information from the companies whose securities they rate and attempt systematically to identify any changes in companies' financial status.

The pattern of recent changes in corporate debt ratings suggests that credit problems have been relatively contained so far, but that there has been some recent deterioration. Last year, Moody's downgraded the bonds of some 62 companies and raised its bond ratings on another 46—four downgradings for every three upgradings. In the first four months of 1982 another 38 companies were downgraded, while only twelve had their ratings moved up.

The bond market, of course, doesn't neces-

Nonperforming Assets at Large Banking Organizations

Yearend	*Percent of total loans, leases, and other real estate owned*
1975	5.1
1976	5.2
1977	3.9
1978	2.5
1979	1.7
1980	1.5
1981	1.8

NOTE: Figures are weighted averages for BankAmerica Corp., Bankers Trust New York Corp., The Chase Manhattan Corp., Chemical New York Corp., Citicorp, Continental Illinois Corp., First Chicago Corp., Irving Bank Corp., Manufacturers Hanover Corp., and J.P. Morgan & Co. Incorporated.

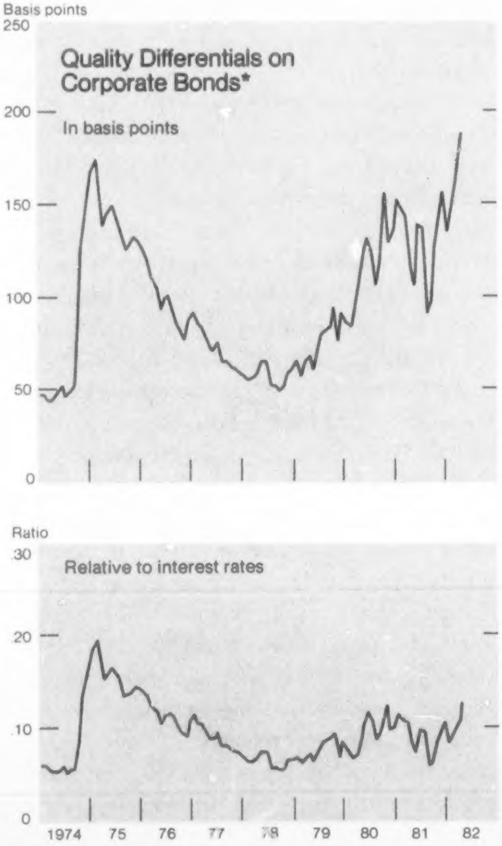
Nonperforming assets include loans on which interest is not being accrued or is being accrued at reduced rates, or on which some other concession has been made from original terms to accommodate borrowers' financial circumstances, plus real estate ("other") acquired in connection with nonperforming loans.

sarily wait for a ratings change before deciding that a company is a worse credit risk than formerly and raising the interest rates on its bonds. Thus, one indication of investor sentiment about corporate creditworthiness is to be found in relative interest rates on bonds carrying different credit ratings.

Such data suggest increased worry on the part of investors recently. In April, the interest rate on Moody's Baa-rated bonds exceeded the rate on Aa-bonds by over 180 basis points, a larger spread than during any month in either the 1974-75 or 1980 recession (upper panel of chart on this page). However, when expressed as a fraction of interest rates, this quality differential is sharply lower than in 1974-75 and just about equal to the maximum figure in the 1980 downturn (lower panel). Moreover, Baa companies have continued to be able to issue bonds —accounting for 10% of public corporate bond issues in 1981 and over 9% from January to April 1982, compared with less than 7% on average during the 1977-80 period.

In the commercial paper market, quality differentials remain substantially lower than they were in either the 1974-75 or the 1980 recession (chart on page 4). This may reflect the very short, one-or-two-month life of most commercial paper, and the confidence which investors have in their ability to anticipate a company's well-being over such a short horizon. For the future, however, caution seems appropriate. Experience makes it clear that quality spreads on either bonds or commercial paper can widen suddenly, as marketplace perceptions of credit risk deteriorate.

Thrift problems. Plainly, a restoration of health among the thrifts will depend upon the return of short-term interest rates to levels below those on thrift mortgage portfolios—generally below 10%. Indeed, Richard Pratt, chairman of the Federal Home Loan Bank Board, indicated late last month that, even if the six-month Treasury bill rate shortly declines to 9.5% and stays down, it would still be likely that over 200 savings and loan associations (S&Ls) would exhaust their net worth—i.e., would become insolvent—by the end of 1983.* Moreover, if bill rates should average 13.5%, according to Mr.



*Rate on Baa-rated bonds less rate on Aa-bonds.

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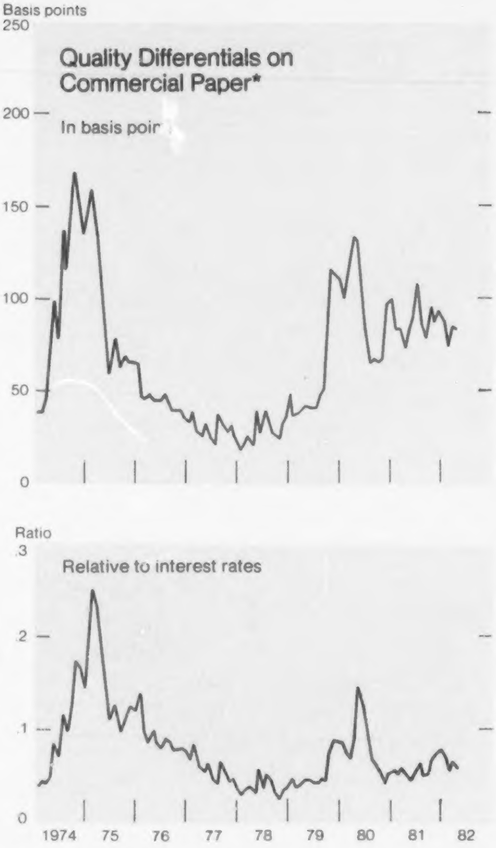
*Interest rates on six-month Treasury bills were around 11.5%-12% at the time of Mr. Pratt's testimony in late May. Such rates averaged about 12.8% in the first five months of 1982.

Pratt, upwards of 550 S&Ls (19% of assets at federally insured S&Ls) might exhaust their net worth by the end of 1983. Mutual savings banks, of course, also face bleak prospects.

Even so, from the standpoint of financial risk, the situation among thrift institutions now seems considerably less ominous than it did a short while ago. That is partly because of the likelihood that Congress will shortly enact a measure to bolster the net worth of thrift institutions. But confidence is also engendered by the success, thus far, of the federal deposit insurance agencies—the Federal Deposit Insurance Corporation (FDIC) and the Federal Savings and Loan Insurance Corporation (FSLIC)—in dealing with failing thrifts.

The staying power of the FDIC, with insurance responsibilities for only 325 savings banks and over 14,000 commercial banks, has never really been seriously questioned. FSLIC, however, insures only S&Ls and therefore faces a much more difficult situation. It has frequently been observed that FSLIC reserves of $6.3 billion and income of about $1 billion per year are small amounts alongside total deposits at insured S&Ls of over $500 billion. Under current law, moreover, FSLIC's borrowing authority at the U.S. Treasury is only $750 million.

However, FSLIC has been highly creative in reducing and stretching out the cost of assisting troubled S&Ls. The agency has been reducing its current outlays by, in effect, selling market-entry rights to acquiring institutions (including S&Ls from other states), by agreeing to subsidize the future interest expense of such acquirers, and by issuing promissory notes to acquiring S&Ls in exchange for capital certificates. This approach has attracted a mixture of praise and criticism, with the heaviest criticism surrounding FSLIC willingness to permit out-of-state acquisitions of failing thrifts. But the effect on FSLIC's ability to minimize its outlays for merger assistance has been substantial. Indeed, the President's Cabinet Council on Economic Affairs has concluded that FSLIC resources are "adequate to meet its projected needs for the foreseeable future."



*Rate on A2/P2-rated paper less rate on A1/P1-paper.

Consumer problems. Judgments about the effects of the recession on household credit problems are complicated by a surge in personal bankruptcy rates. Personal bankruptcy filings in the year ended June 1981 were more than double the number two years earlier. That steep rise undoubtedly reflects an unfortunate increase in personal financial stress and hardship. Still, some of the increase can be explained by liberalization of the federal bankruptcy law in October 1979.

Another complication in assessing household credit difficulties is a markedly different pattern in the delinquency ratios for installment credit and mortgages.* There has been essentially no change in the delinquency rate on bank installment loans so far in the recession—indeed, the delinquency rate in December 1981 (the latest month for which data are available) was actually slightly lower than it was a year earlier. For home mortgage loans, however, the picture is grim. Some 1.7% of mortgages were delinquent in April 1982, up from 1.48% in December 1981 and 1.16% at yearend 1980. The April figure, moreover, exceeds the peak for mortgage delinquencies—1.66%—reached in the aftermath of the 1974-75 recession.

An explanation for this divergence between mortgage and installment loan delinquencies is probably to be found in the relatively discretionary nature of consumer installment borrowing. Much consumer borrowing is for big-ticket items such as autos, appliances, and home furnishings, and the typical consumer tends to be reluctant to undertake such purchases when there is a perceived danger of becoming unemployed and being unable to make loan payments. For mortgages, however, there is not nearly the same opportunity to scale back on a family's obligations when joblessness looms.

With unemployment rates at a discouraging 40-year high, it is understandable that mortgage delinquencies have risen. However, the ability of households to avoid similar problems in connection with other borrowings is encouraging.

Riding it out

Clearly, problems of credit quality exist. But that is not to say that the picture is one of unrelieved gloom and doom.

Importantly, after three years of virtual stagnation, the economy now appears ready to move off dead center (Economy Watch, page 6). Even the moderate 3% growth in "real" GNP widely foreseen for the second half should bring improved prospects for businesses small and large.

Annualized pretax profits of nonfinancial corporations last quarter were $57 billion—or 30%—below the 1981 average level. Even so, nonfinancial corporate cash flow, aided by tax reduction, was unchanged in the first quarter from its 1981 average level.

Moreover, the No. 1 problem for many concerns and individuals—steep interest rates—could ease even with a moderate economic recovery. For that to happen, financial-market participants will have to be persuaded that economic policy will remain noninflationary. Crucial to such persuasion, of course, will be credible action by Congress to bring the budget under control. So far, progress on the budget has been very limited. But all sides now recognize the scope and urgency of the problem—and that is a major step toward a responsible solution.

All this is not to say, of course, that economic-financial problems soon will fade away. Troubled times will persist. But chances are good that the economy will ride out this painful and difficult period.

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*Delinquency rates for bank installment credit are based on the number of delinquent loans relative to the total number of installment loans at a sample of banks which report to the American Bankers Association. Data on mortgage-loan delinquencies are based on dollar amounts and are from the Federal Home Loan Bank Board.

Economy Watch

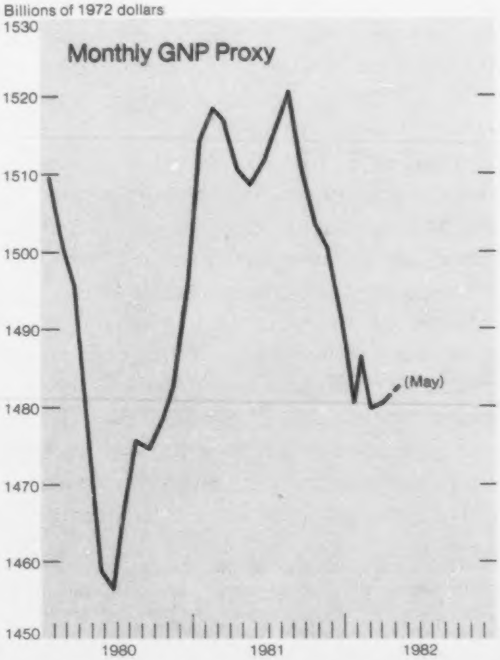
ALTHOUGH the precipitous slide that began last July has been arrested, economic recovery through May remained elusive (chart on this page). Payroll employment data for May—little changed from April's depressed level—confirm that continued sluggishness. Meanwhile, capacity utilization in manufacturing, at close to 70%, is near its postwar low, and the unemployment rate at 9.5% is the highest in 40 years. A pickup in activity is in prospect, but gains will be moderate compared with past recoveries.

Housing activity once again seems to be slipping after inching up earlier in the year. Starts in April, at an annual rate of 881,000, were only moderately above the October trough, and sales of new single-family homes slumped to the lowest level since the inception of the series in 1963. At the same time, capital investment by business remains weak. Shipments of nondefense capital goods have been declining since February, and new orders for such goods at their latest reading (for April) continued the downtrend generally evident since last August. Moreover, spending by state and local governments for goods and services, once the mainstay of the economy in periods of recession, fell appreciably further in the first quarter of this year to a level that, in "real" terms, was last seen in early 1979.

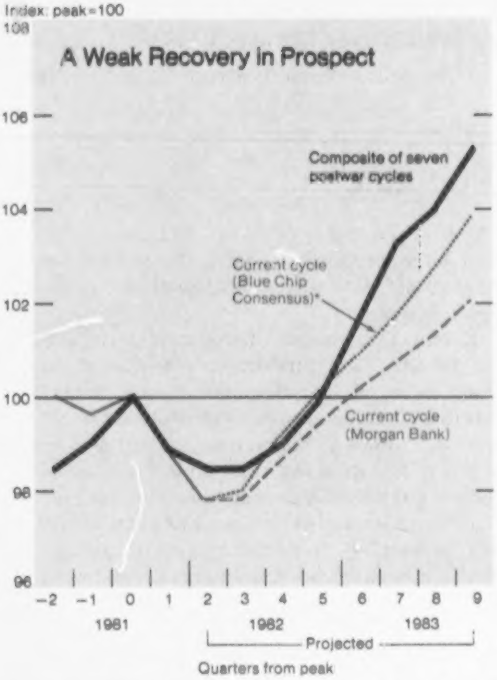
Yet another source of weakness has been the decline in U.S. net exports—brought on in large part by the strength of the dollar (up 15% in the past two years on a trade-weighted basis). In real terms, in fact, the drop in net exports has accounted for 37% of the decline in GNP during the past year.

Consumer spending, in contrast, has moved up moderately in recent months. Auto sales, in particular, perked up in May, with sales of domestic makes at an annual rate of about 6¼ million units—well above the 5½-million unit selling pace of the past seven months. While price and financing concessions probably exerted some impact on auto markets, indications from department stores on May sales were also upbeat.

One explanation of the uptrend in consumer spending, despite the recession and rising unemployment, is recent growth in real disposable personal income. Primarily as a result of the dramatic slowing of inflation, real after-tax incomes have increased at close to a 4% annual rate since December—in contrast to the drop that typically occurs during recession. Moreover, incomes will be pushed even higher



NOTE: Proxy is interpolated from quarterly GNP (actual and projected) on the basis of available monthly data through April.



A Weak Recovery in Prospect

*An average of 40 forecasts issued in early June by Eggert Economic Enterprises.

in July by the more than $40 billion (annual rate) of additional income that consumers will receive as a result of the second installment of the personal income-tax reduction and the escalation of Social Security benefits.

Despite well-maintained growth in consumption, inventory liquidation is apparently continuing, but at a pace somewhat less than the record rate of drawdown that occurred in the first quarter. Importantly, most of the overhang of motor-vehicle stocks appears to have been worked off, owing in part to the gains in auto sales in May. Outside of the automobile sector, however, problems of inventory cleanup still remain, particularly in two key cyclically sensitive areas of the economy—durable manufacturing and nondurable retail trade. While the April drop in industrial production may have helped reduce these excesses, nonauto stock overhangs are probably still large enough to keep production on the sluggish side for a few more months.

Prospects for 1983

Beyond the current quarter, The Morgan Bank is projecting a 3% annual rate of growth in real GNP through 1983—a rate somewhat weaker than that of the Blue Chip Consensus, an average of 40 forecasts, and one that is certainly disappointing compared with previous recoveries (accompanying chart). Typically, real GNP grows at a 5% to 6% annual rate coming out of a recession.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1981	*1982*			
	Q4	*Q1*	*Q2*	*Q3*	*Q4*
Real GNP	−4.5	−4.3	0.2	3.2	3.3
Real consumer spending	−2.2	3.0	1.6	3.0	3.1
Real business-capital outlays	−2.9	−0.7	−11.7	−2.7	0.2
GNP deflator	9.5	3.5	5.1	6.5	6.6
Consumer prices	7.8	3.2	3.0	6.3	6.6
Real disposable personal income	1.7	−0.1	2.0	5.9	1.4
Saving rate (%)	6.1	5.5	5.6	6.2	5.8
Housing starts (Millions)	0.9	0.9	0.9	1.0	1.1
Auto sales (Millions)	7.3	8.3	8.1	8.7	8.9
Unemployment rate (%)	8.4	8.8	9.5	9.5	9.5

NOTE: 1981 Q4 and 1982 Q1 data are actual.

Why the subpar prospects? The key factor is the growth-inhibiting financial environment that has resulted from the Federal Reserve's battle with inflation. Indications keep mounting that the Federal Reserve's money-growth targets are not generous enough to accommodate anything

THE "SWINGING" CCC

OPERATIONS of an agency in the Agriculture Department—the Commodity Credit Corporation (CCC)—are turning out to be a crucial "swing" factor in the federal budget and in the GNP accounts.

For example, the Administration in March revised upward this year's federal spending by $3½ billion—all of it due to CCC activity. And in the first quarter of this year, half of the rise in "final sales" (GNP minus the change in inventories) can be traced to CCC operations.

The CCC, established in 1933, supports farm prices and stabilizes the income of farmers. Before each planting season, the Secretary of Agriculture announces a "loan rate" for each commodity—that is, the price at which CCC values the crop.* If farmers find that market prices are low after harvest, or if they simply need working capital, they can place their crops in storage and use the commodity as collateral for a CCC loan. In the national income accounts, these loans and the collateral held by the federal government are treated as federal nondefense purchases of goods and services. Conversely, repayments of CCC loans decrease government grain holdings and show up in the national income as a decline in federal purchases.

To measure the effect of CCC activity on the "real" economy, CCC purchases typically are stated in inflation-adjusted terms. After last autumn's large harvest and the resulting drop in farm prices, many farmers took out loans with the CCC. As a consequence, federal CCC "purchases" rose by $4.8 billion—in constant 1972 dollars—in the final quarter of 1981 and by $2.4 billion in the first quarter of 1982. As can be seen in the accompanying table, this activity was a significant prop to real final sales during the past two quarters.

Recent Department of Agriculture reports suggest that farm production and income are likely to be off sharply in the current quarter and that CCC loan activity will total only about $1 billion, down $7 billion from the first quarter of 1982. This drop will show up in the national accounts as a sizable decline in nondefense purchases and in real final sales. CCC activity, in this instance, will reflect the falloff in agricultural production from last autumn's high levels.

Swings in Commodity Credit Corporation Activity

(Billions of 1972 dollars at annual rate)

	1981		*1982*	
	Q3	*Q4*	*Q1*	*Q2*
Nondefense purchases	35.6	39.7	41.4	36.0e
Change from previous quarter	−0.5	+4.1	+1.7	−5.4e
CCC purchases	.07	5.5	7.9	1.1e
Change from previous quarter	+1.1	+4.8	+2.4	−6.8e
Final sales	1500.9	1494.2	1499.4	1494.3e
Change from previous quarter	+1.3	−6.7	+5.2	−5.1e
Final sales excluding CCC	1500.2	1488.7	1491.5	1493.2e
Change from previous quarter	+0.2	−11.5	+2.8	+1.7e

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*The loan rate is a "fair and reasonable" price for a crop. To be eligible for CCC loans farmers must have participated in the Department of Agriculture's program to limit crop acreage.

more than subnormal, sputtery economic performance. Even so, though the economy has been in recession, M1–the narrow measure of the money supply–has been persistently above target so far this year. The Fed, however has been decidedly less aggressive in trying to force the aggregates back within the target range this year than it was in the spring of 1981. Indeed, the Fed has pointed to surging NOW account balances as the main element in recent monetary expansion, and the Fed even seems to share the perception among financial-market participants that the growth of NOW accounts is probably more savings-oriented than transactions-oriented. This suggests that a more hospitable monetary climate may emerge in the months ahead, since the Fed may allow itself some leeway in aiming for its monetary targets over the course of this year. However, given the broad restraints imposed by the Fed targets, the outlook for economic activity is necessarily subdued.

The only hope of a solid, full-fledged economic expansion rests on continued gains in reducing inflation. Progress to date has been impressive. In the latest three-month period, the producer price index for finished goods has fallen and the consumer price index has increased at an annual rate of less than 1%. To a considerable extent, however, this remarkable showing has been the result of a beneficial turn in oil prices. Excluding energy, the CPI increased during the latest three months at a 5% annual rate–near the bottom end of the range anticipated for the coming year. If, in fact, the rate of inflation is nearer 6%, and certainly if it exceeds 6%–and if the Fed sticks to its present monetary targets–real growth has little chance of getting above 3% for very long.

Electric Utilities: The Challenge Ahead

PROSPECTS for the electric-power industry, after a decade of adversity, have brightened a bit. Serious problems remain—and not everyone agrees that they can be surmounted. But most observers feel that there has been a turn for the better, even if only temporarily.

The most often cited hopeful sign is that state regulatory commissions are beginning to recognize the financial needs of the industry. Last year the investor-owned electric utilities—which account for roughly 80% of power production—received 319 increases in rates totaling a record $8.3 billion, compared with 247 increases totaling $5.9 billion in 1980. Return on equity in 1981 averaged 12.6%, compared with 11.4% in 1980, which also was the level in the preceding five years.

Other indications of positive momentum, in the eyes of many analysts, are the easing of inflation and of energy-cost increases, and the completion over the next several years of a major construction cycle begun more than a decade ago. Reflecting such factors, utility stocks have performed strongly in recent months—one of the few bright spots in the market.

The recent improvement follows a rather turbulent period for electric utilities, which earlier in the postwar period had enjoyed fairly tranquil times. The 1960s, for example, were relatively calm and predictable. Demand for power grew roughly 7% annually, requiring a doubling of power capacity every ten years. Utilities could count on economies of scale, technological gains, and declining costs per unit of power. Rate reductions were common.

In the 1970s, the picture changed dramatically for the worse. Triggered by sharply rising energy costs, growth in demand for power by business and consumers was cut about in half (to roughly 3½% a year). Unit costs rose steeply, dictating regular rate increases. Nuclear-power delays—caused by stiffened environmental and other regulatory rules of federal, state, and local governments—adversely affected the industry. Moreover, electric utilities, because of their capital intensity, were especially hard hit by inflation, high interest rates, and unstable capital markets. Financial deterioration stretched through the Seventies.

The earnings performance of utilities revealed the growing strain. Earnings of utilities beginning in the early 1970s consistently lagged behind the rate of return authorized by regulators (accompanying table). The gap between allowed and earned returns actually widened each year beginning in mid-decade—from 1.3 percentage points in 1976 to 2.8 in 1980. The widening gap resulted from inadequate rate increases that lagged behind utilities' costs in an inflationary environment.

Returns Authorized by Regulators vs. Actual Earnings

(Percent)

	Authorized	*Actual*
1974	12.5	10.7
1975	12.9	11.2
1976	12.8	11.5
1977	13.1	11.5
1978	13.2	11.4
1979	13.4	11.2
1980	14.2	11.4
1981	15.2	12.6

NOTE: Figures measure return on common equity.

SOURCE: Edison Electric Institute

Borrowing Costs and Earnings

(Percent)

	Average embedded interest rate on long-term debt	*Average interest rate on new long-term debt*	*Return on average common equity*
1965	3.8	4.61	12.5
1966	3.9	5.53	12.7
1967	4.1	6.07	12.8
1968	4.3	6.80	12.3
1969	4.6	7.98	12.2
1970	5.1	8.79	11.8
1971	5.5	7.72	11.7
1972	5.7	7.50	11.8
1973	6.0	7.91	11.5
1974	6.5	9.59	10.7
1975	6.9	9.97	11.2
1976	7.1	8.92	11.5
1977	7.3	8.43	11.5
1978	7.5	9.30	11.4
1979	7.8	10.85	11.2
1980	8.4	13.46	11.4
1981	*	17.6†	12.6

NOTE: Data are for investor-owned utilities. *Not available. †Nine months.

The squeeze on earnings was reflected in a key measure of financial soundness: the ratio of earnings to the interest burden. This industry pretax interest coverage ratio—3.73 in 1969—had by 1980 fallen to 2.53. An inevitable consequence of that decline and of the industry's general financial deterioration was a major downgrading in utility bond ratings. Whereas utilities used to enjoy mostly Aaa and Aa ratings, the typical Moody's rating now is A or Baa. In 1980, for example, thirteen utilities were downgraded while only one was upgraded.

Against a background of declining demand for power—accompanied by financial pressure—utilities in the mid-1970s began canceling the construction of power plants. Between 1975 and the third quarter of last year, 89 generating units were canceled (28 fossil-fueled and 61 nuclear). No statistics are kept on an industry-wide basis as to the cause of such cancellations, but a 1980 spot check of 21 utilities around the country by the General Accounting Office listed three primary reasons: lower rates of increase in electricity demand, financial difficulties, and regulatory complexities.

In 1981, as noted, the electric power industry took a turn for the better. Key indicators of improvement included a slight narrowing of the gap between the industry's earned and authorized returns, a rise in the interest coverage ratio, and a shortening of "regulatory lag" (the time between the filing of a rate increase and its approval by the authorities) to an estimated nine months from the earlier twelve months. An added recent source of financing help for many utilities has resulted from a January 1 change in the tax laws. Utilities that qualify under the law now can offer investors the chance to exclude from federal income taxes up to $750 ($1,500 on a joint return) per year in dividends that are plowed back into additional shares of a utility's common stock instead of taken in cash. Electric-utility dividend reinvestment plans are not new, of course. But in the past dividends that went to buy more stock were still taxable as ordinary income, the same as regular cash dividends. Industry figures on the amount of funds raised since the new law took effect are not available, but some utilities report a sizable increase in such reinvestments.

The big question now: Will the recent gains in utility performance continue?

Optimism is by no means universal. Indeed, two recent studies* are gloomy about the industry's prospects in the 1980s, primarily because of doubts that public-utility commissions will authorize rates of return adequate to restore and maintain the industry's financial health.

The Edison Electric Institute, which represents the investor-owned utilities, is concerned about the future. It foresees the possibility of power shortages late this decade or early next decade unless the industry's financial health improves markedly. (The EEI electric-power forecast to 1990 and the potential for shortages is discussed in the box on page 13.) Indeed, Peter Navarro, of Harvard's Energy and Environmental Policy Center, warns that the nation may not have to wait until the 1990s for the lights to dim**: "In the Pacific Northwest, reserve margins have sunk below 20% and outages have already occurred. And in Colorado, reserve margins are negative, power must be imported from other states, and brownouts are likely as early as 1984."

Unquestionably, a strong and growing U.S. economy will require sufficient and dependable electric-power supplies. What needs to be done? A broad action program warrants prompt adoption. Among its components:

Regulation. Performance of public-utility commissions in many states has been less than adequate. Requests for rate increases get mired down in commissions that often are understaffed and inexperienced. Moreover, political concerns have kept many commissions from allowing the higher rates that would produce a fair and adequate rate of return for power producers. The trouble with short-run appeasement of consumer groups is that it can lead to more expensive power in the future.

Capital Expenditures by Investor-Owned Electric Utilities

(Billions of dollars)

1970	10.1	1979	24.4
1971	11.9	1980	25.7
1972	13.4	1981	27.2
1973	14.9	*Projected*	
1974	16.4	1982	30.0
1975	15.1	1983	31.0
1976	17.0	1984	32.0
1977	19.8	1985	35.0
1978	22.4	1986-90	210.0

NOTE: Projections are by Edison Electric Institute

Regulatory procedures badly need streamlining. Today, a utility may need to get more than 250 separate permits, licenses, and assorted other approvals (from federal, state, and local agencies) before it can proceed with building a power plant. At any point in the drawn-out process, environmental and other "intervenors" can block action by requesting hearings—even if the topic of the hearings was covered earlier in the application process.

Speeded-up licensing could save the industry hundreds of millions of dollars in construction costs incurred each year as a consequence of lengthy delays and repeated disruptions. For example, Gulf States Utilities is building a nuclear plant due to be completed by 1985. A one-year delay—to 1986—would increase costs by an estimated $300 million.

The goal should be "one stop" licensing, with utilities able to get plant siting, construction, environmental, and financing clearances at one place and at one time. Significantly, more

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**The Potential Impact of the President's Economic Recovery Plan on the Electric Utility Industry*—a study done for the Energy Department by Booz-Allen & Hamilton; *Utilities in Crisis: A Problem in Governance*, the Aspen Institute.

***Harvard Business Review*, May-June 1982, page 92.

POWER ADEQUACY

NUMEROUS power-plant cancellations in recent years by a financially weakened industry raise the question: Will there be enough electricity to meet the future needs of consumers and business?

Some industry experts doubt that there will be adequate and reliable power supplies available ten years from now. They see the possibility of power disruptions and dim-outs. Others are more optimistic about the outlook.

The Edison Electric Institute (EEI) is among the worriers about future power supplies. The EEI calculates that investor-owned utilities plan to add 134,000 megawatts (MW) to capacity by 1990. Noninvestor-owned (e.g., cooperatives and government-owned) utilities plan an additional 36,000 MW–a combined total of 170,000 MW. EEI sees a need for 185,000 MW of new capacity by 1990 to maintain a minimum reserve capacity of 25% to meet unexpected or emergency demands. Planned capacity additions, thus, fall short by 15,000 MW–about 2% of installed capacity foreseen for 1990.

While a 2% shortfall may not seem staggering, the EEI stresses that power inadequacies could be much larger if capacity-addition schedules, which have already slipped many times, slip again. Moreover, some regions of the nation–especially fast-growing areas of the sunbelt–may feel the power squeeze more than the over-all numbers would suggest. Such areas could, of course, buy electricity from neighboring utilities.

Actually, power disruptions, should they become threatening, could be headed off–at least in the short term. Though very costly to run, gas turbine generators could be pressed into use to assist in meeting power needs. Delivery of turbine generators ordered from manufacturers normally takes no more than six months.

Some energy analysts foresee no need, however, for such emergency-type power plants. They predict adequate conventional power supplies, mainly because generating capacity will be able to handle demand for power that will show only moderate growth due to continuing conservation by people and business. Partly because of the recession and partly because of consumer conservation, electric-power demand, over all, was up less than 1% last year from 1980. The growth rate this year is expected to be quite similar–on the order of 1% to 1.5%. Some individual utilities are actually showing no increase in power demand this year.

Since 1973, the annual rate of electricity growth has averaged 3.5%. The big unknown is the demand for electric power when the economy–which has been stalled on dead center since 1979–perks up.

efficient regulatory procedures abroad enable Germany and Japan to build power plants in about half the time it takes in the U.S.

Cost basis. Regulators, in determining rates, generally require utilities to base their requests on cost experience in past years, rather than on projected costs. The steep inflation pace of recent years has caught power companies in a cost squeeze. As inflation slows, the problem will be less acute than in the past. But without absolute price stability–which no one foresees–a forward-cost basis would ease the pressure on utilities of a rising price level, caused by regulatory insistence on historic costs in rate applications. Fortunately, state regulators increasingly are accepting forward-cost estimates.

CWIP. The financial plight of electric utilities would be relieved importantly if they could bill customers for construction work in progress (CWIP). Some state commissions do allow utilities to include plant construction costs in their rate base and thereby to recover financing costs as they are incurred, but other commissions only allow some of the construction costs, and still other commissions do not permit utilities to begin recovering any of the costs associated with construction until the new plants are complete—often after eight to fourteen years have elapsed and hundreds of millions of dollars have been spent. If construction costs were put into the rate base, utilities would be generating a larger portion of the needed funds instead of having to compete strenuously in the financial marketplace for enormous amounts of capital. There is, of course, an opposing point of view on the issue: Some regulators believe that customers should not have to pay for any costs of a plant before it is put in service.

Talk of deregulation

Deregulation—introducing market forces and competition within the industry—is reported to be under study by the Reagan Administration. Power generation is considered the most likely candidate for deregulation, although power transmission and distribution are also believed to be under consideration. While there is support in Washington for the principle of deregulation, there is substantial disagreement about how to go about it. No one expects early action.

One idea under study as an alternative to the present regulatory setup calls for scrapping state and possibly federal utility regulation in favor of regional power groups whose commissioners would be appointed by state governors. The idea would be to make optimal use of existing generating plant. Advocates of regional regulation also stress the importance of freeing utility companies from local regulators who sometimes curry consumer and political favor at the expense of the industry.

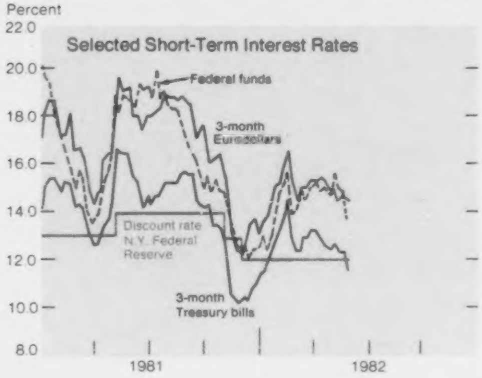
Even with local regulation, power companies already have joined together to operate power pools to serve customers within a region. That capability could be expanded so that electrical power could be transmitted not only within a region but also to other regions. Thus New England—expected to have a large reserve of power capacity by 1990—might transmit power to the Midwest, which is forecast to have reserve capacity needs by the end of the decade.

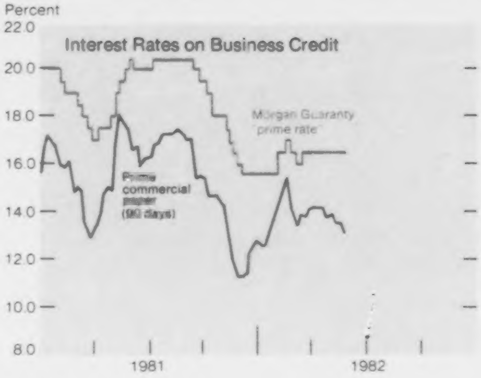
Diversification—by shifting assets to other fields—is another way that utilities can ease the burden of regulation. For example, coal and telephone subsidiaries provided more than 40% of consolidated corporate operating income for Pacific Power and Light Company in 1981. Montana Power Company obtains almost half of its total earnings from sources other than electric power. TECO Energy, Inc.—a holding company for Tampa Electric Company—is in coal mining, barge operations, and a storage and transfer terminal.

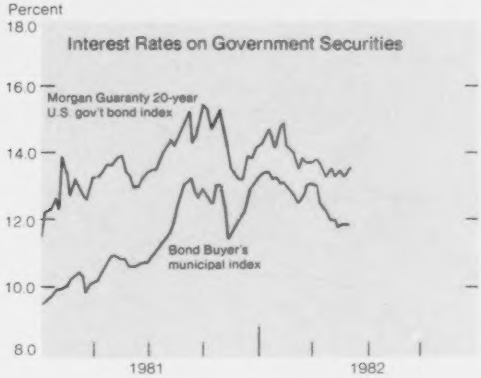
Although the subject of diversification is increasingly talked about within the industry, only a relative handful of companies have begun to diversify. Some critics argue that diversification will divert management from utility operation. Even so, diversification could gain favor in the years ahead. Says Douglas C. Bauer, senior vice president of the Edison Electric Institute: "Even if the financial health of the electric-utility industry is restored and the investor-regulator relationship improves, diversification remains an important strategic alternative."

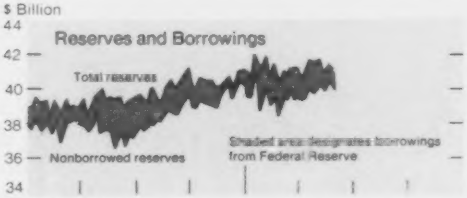
All in all, the nation's electric-power industry faces a variety of challenges. Far-reaching change seems to lie ahead for the industry—and for its regulators.

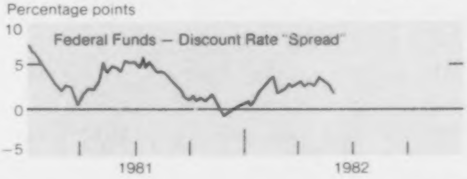
MONETARY INDICATORS

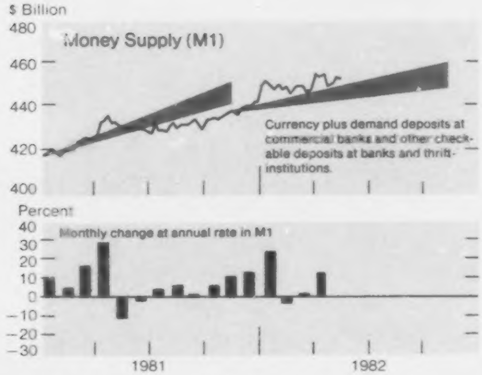


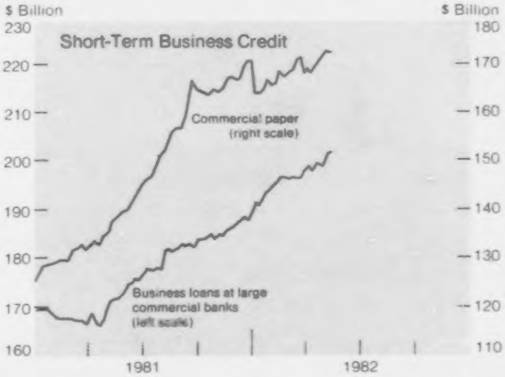












NOTE: Shaded areas on the money supply chart represent the Federal Reserve growth targets for the periods from the fourth quarter 1980 to fourth quarter 1981 and from the fourth quarter 1981 to fourth quarter 1982. Business loans are net of bankers' acceptances. All data except interest rates and member bank borrowings are seasonally adjusted.

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Inflation's Future. *Is the recent dramatic slowing in inflation for real? A rising price level hasn't been banished, but the U.S. may have achieved a fundamental improvement.* 1

Economy Watch. *Drop in jobs and backup of interest rates suggest that recovery remains tentative. Latest projections.* 6

Trade Trends. *A slump in U.S. exports has played a major role in the recession. Part of the blame can be placed on the spectacular rise of the dollar in foreign exchange markets.* 8

Rebuilding America. *Roads, bridges, water systems, mass transit—all have been neglected. Now the bill is coming due. Size of the "infrastructure" problem—and how to cure it.* 11

Inflation Slowdown: Temporary or Lasting?

THE dramatic slowing of inflation in the first five months of this year—to a 3.5% annual rate of increase in consumer prices, compared with an 8.7% rate in the same months last year—has raised questions in the minds of consumers, businessmen, and investors: Is the deceleration merely a product of the recession? Or is something more fundamental—and lasting—going on?

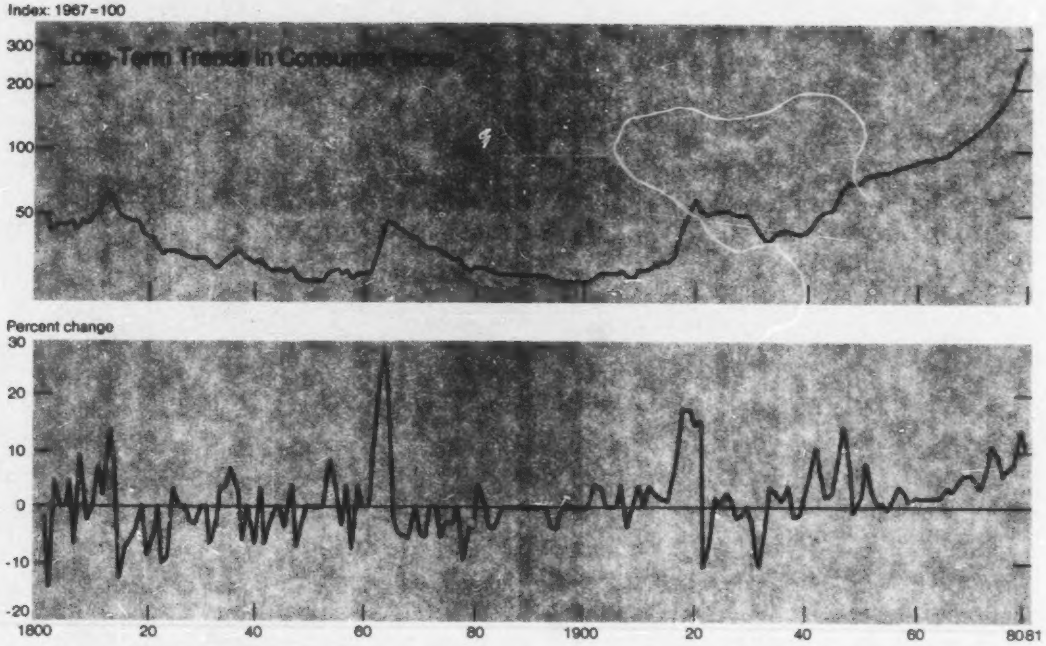
Inflation is not about to be banished. It's pace, in fact, seems likely to quicken a bit later this year. Even so, recent inflation trends cannot be dismissed as mere aberration.

Indeed, a look at historical patterns and a review of inflation results in major industrial countries since the end of World War II suggest that the U.S. may well have accomplished a fundamental slowing of price rises. In particular, the disturbing trend of the past twenty years for the inflation rate to climb inexorably appears to have been broken.

Inflation in perspective

A major change in the price behavior of the United States economy occurred after the Second World War. Before the 1940s, the price level tended to rise sharply during wars but to drift downward again in peacetime. As a result, the price level in 1940 was the same as it had been in 1800 (chart on page 2). Atypically, the price rises that accompanied World War II were not reversed after the war. Although prices did drop temporarily, they soon turned up—and they have been rising ever since.

Moreover, since the early 1960s inflation has shown a persistent tendency to accelerate. To



Long-Term Trends in Consumer Prices

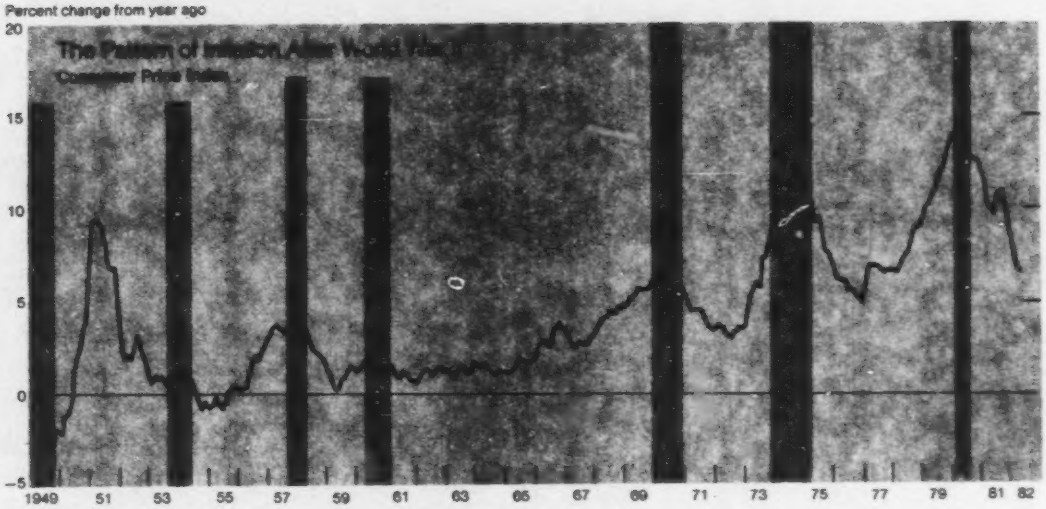
SOURCE: Historical Statistics of the United States.

be sure, the pace has slowed during recessions (chart on page 3). But these cyclical slowings never brought inflation to as low a level as during the previous cycle. As a result, the ensuing inflationary rise would start each time from a higher level.

The recent inflation pattern, of course, does not represent a return to prewar price stability. It does, however, break with the mold of the past twenty years. Among various indicators, the most obvious is that the current deceleration in prices has been sharper and more sustained than any since the early 1960s. Already, the rate of increase in prices of goods in the intermediate stages of processing has fallen significantly below the trough reached after the 1974-75 recession. The increase in prices of finished goods, which respond somewhat more slowly to changes in the economy, is also likely to fall below the last cyclical low during the second half of this year. Inflation during the next economic cycle, therefore, will be starting from levels below those of the previous cycle–the first downward ratcheting in inflation since the early 1960s.

Restraint here and abroad

A more basic reason to believe that price rises will be lower in the coming cycle is the much higher priority that inflation control has been receiving in policy deliberations in this country over the past few years. Inflation experience abroad suggests that anti-inflation policies–most importantly fiscal and monetary restraint–can successfully contain an upward in-



NOTE: Shaded areas represent recessions as designated by the National Bureau of Economic Research.

flation trend. And the U.S. is proving to be no exception.

There is a remarkable similarity in the inflation experience of industrial countries (table on page 4). All shifted to a climate of inflation after World War II. Furthermore, all had a sharp acceleration in inflation in the early 1970s. In fact, the country with the lowest inflation rate between 1970 and 1975 (West Germany) had a higher inflation rate than the country with the worst performance during the previous two decades (Japan). There was also considerable consistency over time in the inflation performance of individual countries–the "low-inflation" nations during the 1950s and 1960s tended to be the low-inflation nations during the early 1970s.

During the second half of the 1970s, inflation in industrial countries, on average, slowed somewhat. But the performance of individual nations diverged significantly. In general, high-inflation countries experienced further acceleration in inflation (Japan and The Netherlands were two exceptions), while low-inflation countries generally achieved lower inflation. The United States and Canada, however, were major exceptions among the traditionally low-inflation countries.

The deterioration of U.S. price performance relative to that of other traditionally low-inflation countries can be explained primarily by the very low priority given to inflation control by U.S. economic policy following the 1974-75 recession. Most importantly, both fiscal and monetary policy were designed to return the economy to "full employment" as quickly as possible. These policies were successful, resulting in average "real" growth of 5.2% between 1975 and 1978. This compares with policies in West Germany, for example, that gave a much higher priority to inflation control. Growth in West Germany averaged only 3.2% during this period. This experience suggests that traditional anti-inflation policies do make a significant dif-

International Inflation Comparisons

(Percent change at annual rate in consumer prices)

	1950-70	*1970-75*	*1975-80*
United States	2.4	6.7	8.9
West Germany	2.2	6.1	4.1
Switzerland	2.4	7.7	2.3
Canada	2.5	7.3	8.7
Belgium	2.5	8.4	6.4
South Africa	3.2	9.3	11.9
Italy	3.5	11.4	16.3
Netherlands	3.6	8.7	6.0
United Kingdom	3.7	13.0	14.4
Australia	4.1	10.2	10.6
New Zealand	4.1	10.2	14.8
Ireland	4.3	13.2	14.1
Austria	4.4	7.3	5.3
Sweden	4.4	8.0	10.5
Norway	4.5	8.4	8.4
Denmark	4.5	9.3	10.4
France	4.8	8.9	10.4
Finland	4.9	11.7	10.7
Japan	4.9	11.5	6.5
Weighted average	3.7	9.7	9.0

ference to price performance. Particularly important is the fact that restrictive policies maintained for several years have been successful in reversing a previous acceleration in inflation in countries with inflation records similar to that of the U.S.

U.S. policy has shifted dramatically toward restraint since the Federal Reserve adopted new operating procedures in October 1979, which focused on controlling the quantity of reserves supplied to the banking system rather than the level of the Federal funds rate. This restrictive policy has been maintained for close to three years—holding economic activity basically flat over that period—and its effects are becoming increasingly clear.

Wages: a new flexibility

Finally, the case for more than just a cyclical easing in inflation is bolstered by changes in wage patterns. In the past year, flexibility in wage-rate setting has increased notably.

U.S. price and wage behavior in earlier years characteristically had been unresponsive to economic conditions. This made inflation difficult to reduce once it became embedded in the system. Although evident also in prices, unresponsiveness was particularly noticeable in wage rates. A sharp break in wage patterns in a number of industries, however, suggests that this rigidity is decreasing. Behind the new flexibility, evident in both union and nonunion areas, is an increase in the importance of competition in the wage-setting process.

Auto and steel workers, for example, traditionally had earned about 40% more than the average for all workers in manufacturing. During the 1970s this premium rose to about 80%.

Inflation Slowdown

(Percent change at annual rate)

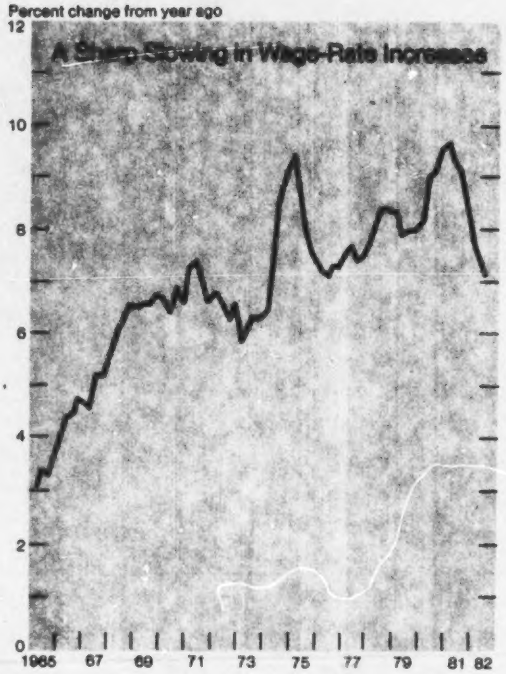
	1980	*1981*	*First five months of 1982*
Consumer price index	12.4	8.9	3.5
Food	10.0	4.3	5.1
Energy	18.1	11.9	−13.7
House purchase and finance	18.8	10.4	6.1
Other	9.8	9.2	5.7
Producer price index	11.9	7.1	0.4
Food	7.3	1.6	9.4
Energy	28.1	14.4	−27.5
Other	10.8	7.7	3.6

But, recently, large auto and steel firms have faced growing competitive pressures from imports and from domestic firms with lower labor costs. This has put downward pressure on wages in these industries and has led to renegotiation of the auto contract and to a request for renegotiation by the steel industry. Moreover, in the case of autos, competitive pressures are bringing about a relaxation of restrictive work rules, which holds out the promise of reduced labor costs through improved productivity.

In other industries, unionized firms are facing growing competition from new, nonunionized firms with lower labor costs. For example, significant rollbacks in wages in the meat-packing industry are largely the result of competition from new firms with more modern equipment and lower labor costs. The deregulation of the airline and trucking industries also has heightened competition based on labor costs. Entry of new low-cost firms into these industries has resulted in wage reductions from the relatively high levels that had been achieved with the help of government protection.

These competitive pressures are leading to wage reductions and freezes. And this pattern is beginning to spread into industries that do not immediately face intensified competition. During the past year the increase in wage rates has fallen to its lowest point since 1976 (chart on this page). And, given the tendency of wage rates to lag the economic cycle, it is likely that some further slowing will occur.

The experience of other countries, together with the recent results in the United States, suggests that traditional anti-inflation policies maintained over a period of time can contain —though not eliminate—the inflation bias of modern industrial economies. Pursuit of such policies in the U.S. (as well as abroad) can be expected to produce diminished inflation with moderate economic growth. Significantly, that means that U.S. consumers, businessmen, and investors can look forward to a lower average rate of inflation during the next five years than they experienced during the recent past.



NOTE: Average hourly earnings adjusted for overtime in manufacturing and interindustry employment shifts.

Economy Watch

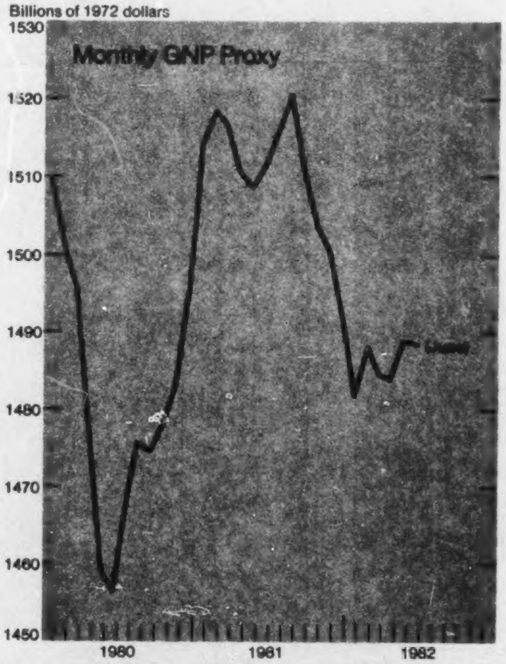
ECONOMIC recovery remains tentative. The picture had appeared to brighten somewhat with the relatively strong numbers for May —especially the rebound in construction activity and an estimated 10% annual rate of increase in "real" consumer spending. But that momentum wasn't sustained in June, judging by the widespread decline in payroll employment and the falloff in car sales.

The employment drop is particularly discouraging, since payroll employment is a comprehensive and reliable measure of monthly economic activity. Its June decline—marked by an especially sharp drop in manufacturing-sector jobs—clearly has negative implications for last month's industrial production and the generation of personal income.

The backup of short-term interest rates in June was another disheartening development. The Federal funds rate, for instance, rose by over 100 basis points during the month, while 90-day bank CD rates posted a somewhat larger rise. These increases appear to have resulted from special factors rather than from an overt tightening by the Federal Reserve. A key factor was the need of banks to roll over a large volume of maturing CDs. Bank competition for Fed funds, in order to avoid showing discount-window borrowings over a quarterly statement date, was another factor.

Some of the pressures in the short-term market have begun to recede in July, but interest rates should not be expected to fall significantly. It seems unlikely that the Federal Reserve can ease substantially so long as the key monetary aggregates, M1 and M2, remain near the top of their target ranges. Nor does a decline in demand for money appear likely if the consensus forecast of roughly 10% growth in nominal GNP during the coming year is anywhere near the mark. These considerations—together with the stimulus to consumer spending expected from the personal tax cut and the increase in Social Security benefits that took effect July 1—suggest that interest-sensitive capital investment probably will continue to be crowded out by consumption and government spending.

Business investment activity is drying up as a result of high interest rates and excess capacity. According to the Commerce Department's latest survey of business spending intentions, taken in late April and May, investment plans for 1982 have been cut 5% since the January-February survey. Investment spending is now expected to show a 2.4% drop in real



NOTE: Proxy is interpolated from quarterly GNP (actual and projected) on the basis of available monthly data.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

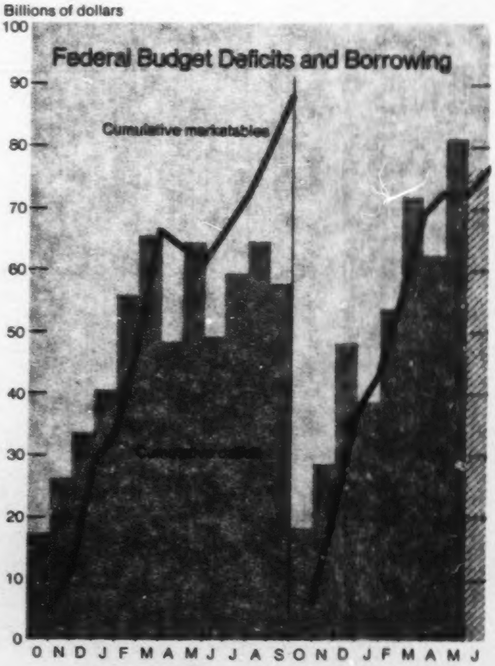
	1981	1982			
	Q4	*Q1*	*Q2*	*Q3*	*Q4*
Real GNP	−4.5	−3.7	0.6	2.3	3.2
Real consumer spending	−2.2	3.4	0.9	3.4	4.5
Real business-capital outlays	−2.9	0.7	−9.4	−8.9	−4.9
GNP deflator	9.5	3.8	5.1	6.5	6.3
Consumer prices	7.8	3.2	4.3	7.2	6.0
Real disposable personal income	1.7	0.0	2.3	5.4	2.5
Saving rate (%)	6.1	5.4	5.7	6.2	5.7
Housing starts (Millions)	0.9	0.9	1.0	1.1	1.1
Auto sales (Millions)	7.3	8.2	7.4	8.3	8.8
Unemployment rate (%)	8.4	8.8	9.5	9.6	9.6

NOTE: 1981 Q4 and 1982 Q1 data are actual.

terms. Meanwhile, incoming data on new orders for nondefense capital goods confirm the deterioration in investment plans. New orders in April and May were 4% below the first-quarter rate and 8% below the rate in last year's fourth quarter.

The government's fiscal position is not encouraging, with receipts from corporate taxes in June appearing to have run more than $4 billion (27%) below receipts a year ago. Individual tax declarations–paid on June 15–appear to be little changed from a year earlier. Growth in government spending, however, has remained strong. As a result, the cumulative deficit for the first nine months of fiscal 1982 now stands at an estimated $76½ billion, $27 billion higher than the figure for the first nine months of fiscal 1981 (accompanying chart). The tax cut and the impact of continued economic weakness on Treasury inflows probably will push the current year's deficit into the $105 billion-$110 billion range.

According to The Morgan Bank's estimate, the actual budget deficit for fiscal 1983 is likely to be between $140 billion and $145 billion rather than the $104 billion which the Congressional budget resolution set as a target. About three fourths of this difference is attributable to more pessimistic assumptions with respect to economic growth and interest rates than those made by Congress. The remainder reflects the expectation that Congress will have some difficulty in raising taxes and cutting spending by the full amount called for in the budget resolution.



SOURCE: U.S. Treasury Department. June deficit is estimated by The Morgan Bank.

U. S. Trade and the Recession

WEAKNESS in U.S. foreign trade has contributed importantly to the recession. The extent of that impact can be seen by comparing changes in "real" (inflation-adjusted) net exports—the difference between exports and imports—with changes in real GNP. In 1982, for example, net exports of goods and services, measured in 1972 dollars, will decline an estimated $7 billion—accounting for almost half of the expected decline in GNP this year (table on this page).

The deterioration in this country's external accounts contrasts markedly with the situation that prevailed in 1979 and 1980—when real net exports rose $27 billion. Over that two-year period, the rise in net exports accounted for roughly 60% of the growth of real GNP. The recent pattern is much different: a foreign-sector drag on growth. Pulled down by net exports, growth in real GNP between 1980 and 1982 is expected to be less than a third that of the 1979-80 period—even though, as the table shows, the domestic sectors of the economy in aggregate have been performing better recently than they had been earlier.

The changing impact of net exports on the economy reflects many factors—ranging from the size of Soviet grain crops to economic conditions in the U.S. and abroad. Clearly, a key role must be assigned to the dramatic strengthening of the U.S. dollar in foreign exchange markets—and to the effects of that strength on U.S. merchandise trade (chart on page 9).* During the late 1970s, as the value of the dollar slumped, U.S. exports became progressively cheaper in terms of foreign currencies and imports progressively more expensive, with the result that the merchandise trade balance improved sharply. Beginning in late 1980, however, the dollar rose strongly, and, except for some softening at the end of 1981, it has continued to advance. Indeed, in the past month, the dollar was pushed to the highest level in more than a decade.

Such movements in the foreign exchange value of the dollar have played a more important role in shaping economic activity in the U.S. than they would have, say, ten years ago when imports and exports made up a much smaller fraction of GNP. Last year, for example, real exports amounted to 10½% of real GNP, compared with 6½% in 1971.

Net Exports—and Their Effect on GNP

(Change from previous year; billions of 1972 dollars)

	GNP	*Net exports*	*Production for the domestic market*
1979	46.1	13.1	33.0
1980	−2.3	14.3	−16.6
1981	29.6	−7.1	36.7
1982 est.	−16.8	−7.1	−9.7

Item by item

Swings in the value of the dollar have had far-reaching impact on both sides of the merchandise trade accounts—and in just about every major trade category (chart on page 10).

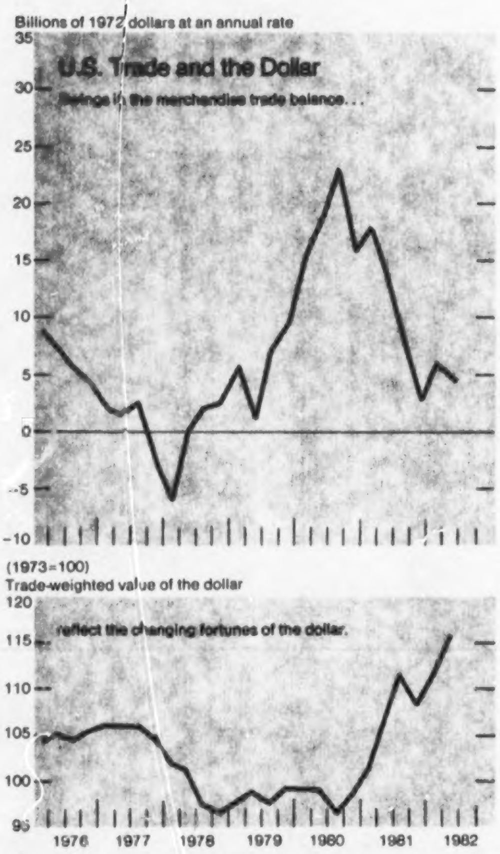
Particularly striking is the decline that has

***This discussion omits U.S. services transactions because they are dominated by the earnings of U.S. corporations abroad and foreign corporations in the U.S. and by interest payments. These transactions, while a part of GNP, do not have immediate impact on employment and on other key measures of cyclical performance.**

occurred in the traditionally large surplus the U.S. enjoys on trade in capital goods. Again using 1972-dollar measures—a proxy for the actual volume of goods in trade—that surplus ran as high as $21 billion at an annual rate in mid-1980, but it has fallen by almost $10 billion since then. Roughly half the decline was on the export side—in part reflecting a drop in U.S. aircraft sales abroad. A general falloff in capital spending in Europe, and recently in developing countries as well, also apparently played a role. Meanwhile, a broadly based rise occurred in imports of machinery—electrical and nonelectrical alike.

The pattern for industrial supplies and materials other than petroleum was similar—with the surplus rising vigorously in 1979 and early 1980, but tending to slip thereafter. Much of the decline seems to reflect rising imports of iron and steel products.* In addition, a significant increase in imports of chemicals has trimmed the traditionally large surplus the U.S. enjoys in chemicals trade. Besides being influenced by the rise in the dollar, trade in chemicals apparently was affected by the decontrol of oil prices in the U.S. This reduced the advantage U.S. chemicals producers enjoyed because of relatively low energy costs.

Trade in industrial materials, of course, is especially sensitive to economic conditions in this country and overseas—as well as to relative exchange rates. The fact that the U.S. surplus in industrial materials was strengthening late last year and early this year presumably reflects the beginnings of a cyclical turnaround in Europe and the growing weakness of the U.S. economy during this period.


U.S. Trade and the Dollar

NOTE: The bottom panel depicts the exchange value of the dollar relative to fifteen major foreign currencies, weighted by U.S. trade in manufactured goods with the fifteen countries.

U.S. trade in autos and in other consumer goods has been characterized by growing deficits in the past year or two. But, judging by the relatively moderate changes in the net trade flows that have occurred, exchange-rate changes seem to have exerted a less powerful influence than in the case of either capital goods or industrial supplies. What deterioration there has been in the balance of auto trade has reflected a decline in U.S. exports; imports have been

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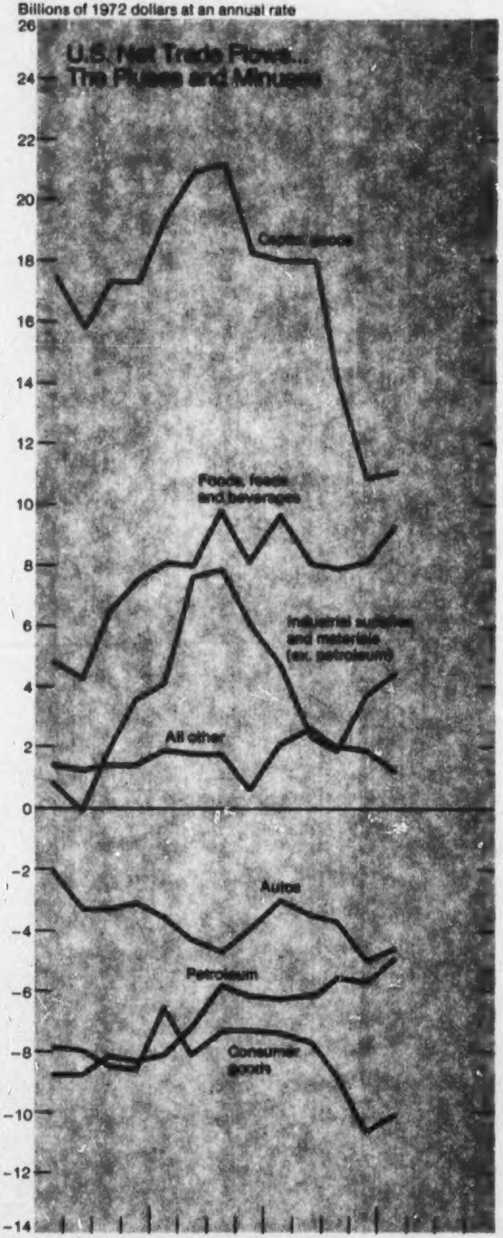
*Steel imports in the future may be crimped by a ruling issued by the Department of Commerce last month. Importers buying steel from seven European countries and Brazil and South Africa are required to post bonds against possible penalty duties to be decided on later this year. The bonds are being required after a preliminary finding that steel exports from those countries are subsidized in violation of U.S. law.



relatively stable at the high level reached in the late 1970s. Even so, auto imports, particularly from Japan, have been capturing an increasing share of the U.S. market.

In contrast, the large surplus the U.S. enjoys in foods, feeds, and beverages has been well maintained—seemingly impervious, at least until now, to the changed competitive environment the rising dollar has brought about. At the same time, the U.S. petroleum deficit has narrowed—reflecting conservation, fuel switching, and the U.S. recession. Such trade, of course, is not affected, directly in any case, by exchange-rate changes since oil sales are denominated in U.S. dollars.

Looking ahead

In the current policy setting, with unusually high interest rates attracting heavy capital inflows to the U.S. and causing strong demand for dollars, an appreciable decline in the value of the dollar that would reverse the recent trade pattern doesn't seem likely. Even if U.S. interest rates drop during the next several months, foreign governments presumably would take that opportunity to reduce rates in their own countries. Thus, interest-rate differentials would continue to favor the dollar, implying continuation of a relatively strong dollar for some time to come. That is a likely prospect even though the dollar may seem overvalued on the basis of the weakening that has been occurring in this country's merchandise trade pattern in the past year or two.

If events unfold that way, net merchandise exports are likely to continue to act as a depressant on the U.S. economy—an important reason why the recovery from the recession of 1981-82 promises to be less vigorous than earlier recoveries in the postwar period.

Rebuilding America's Infrastructure

A decade of neglect has left the nation's infrastructure—its roads, bridges, tunnels, water systems, public transport—in serious disrepair. Engineers estimate that the interstate highway system, which handles half of the nation's road traffic, is deteriorating at the rate of 2,000 miles per year—closing down lanes in many sections. Nearly half of the 560,000 bridges in the U.S. are inadequate or structurally deficient. New York's transit system is barely able to function. Houston faces mammoth traffic snarls; some of its waste-treatment facilities are strained. Many areas of the Sunbelt face major problems of water supply. Sewer lines in many Midwest areas hinder industrial and residential growth.

Crumbling facilities are beginning to take a toll. Increasingly, people across the country are experiencing service disruptions, congestion, and delays. The result is reduced efficiency, stunted productivity, and rising costs. Indeed, the decay of public facilities is beginning to undermine the private sector, is starting to raise a barrier to economic growth, and is threatening U.S. competitiveness in the export market. Most European nations and Japan, in contrast, have maintained high levels of infrastructure investment. France, for example, has improved its rail roadbeds to handle a train that can speed 250 miles per hour between Paris and Lyon. Fortunately, U.S. officials are increasingly aware of the size and complexity of the problem—a vital first step in marshaling public support for a rebuilding program.

Deterioration of public facilities is the result of a dramatic cutback in capital spending by states and localities—both on new projects and on repair and maintenance of aging facilities. During the 1950s and most of the 1960s, state and local nonresidential investment (in constant 1972 dollars) grew at a brisk rate to a peak of $22 billion in the late 1960s. Such outlays more than kept up with the growing population. But a subsequent decline had by the end of the 1970s reduced public-facility outlays to a fraction of the earlier spending pace (chart on page 12).

Some of this cutback reflected completion of the interstate highway system and reduced needs for educational facilities following a decline in the growth of the school-age population during the late 1960s and early 1970s. Even when these factors are taken into account, however, the growth of public spending showed a sizable decline during most of the 1970s (bottom panel of chart on page 12).

The significance of such sharply reduced spending on public facilities is shown in the table on page 13. As the top line indicates, spending on state and local structures—adjusted to account for slowing in the growth of spending on highways and schools during the Seventies—rose at an average annual rate of 2.4% between 1950 and 1980. In the past two years, however, such outlays rose at a mere 0.7% rate, below the growth rate of the population. During this period, investment in public facilities has sagged a cumulative $25 billion (in constant 1972 dollars) below what it would have been if the adjusted growth trend had been maintained. If this pattern continues, the constant-dollar "gap" in spending for public facilities will widen to $182 billion by 1985* (right

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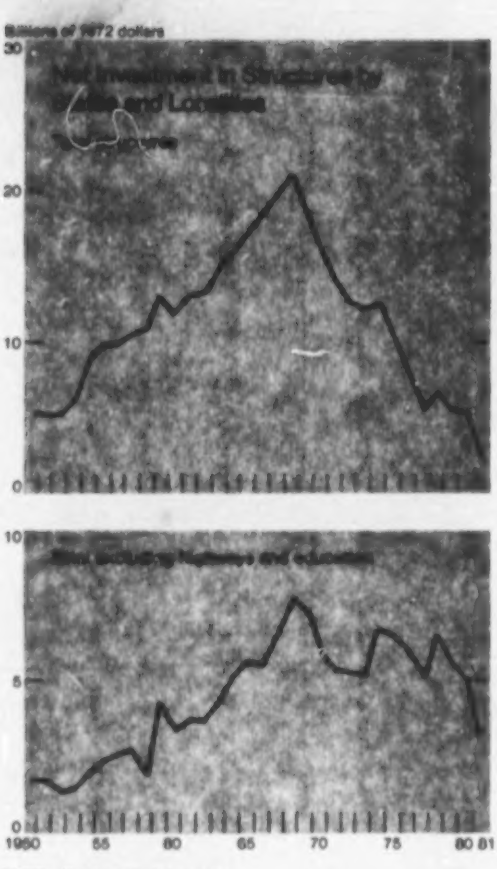
*The long-run growth rate of 2.4% used to derive the gap is conservative by historical standards. For example, during the 1925-40 period, spending on public facilities rose at an average annual rate of 4.3%—slightly higher than the 1950-80 growth rate of 3.8% (unadjusted for the slowdown in spending on highways and schools in the Seventies).



NOTE: Totals exclude housing.

column in table). In current dollars, this would be equivalent to $500 billion—or five interstate highway systems.

Behind the sag

The cutback in spending can be traced in part to changing priorities. With the advent of the "Great Society" in the mid-1960s, all levels of government began to shift emphasis away from capital projects and toward social-welfare programs. At the federal level, for instance, construction grants as a share of total grants to states and localities fell from 44% in the early 1960s to 25% by the late 1970s. Other factors also played a part in holding down spending on public facilities. Among them:

Credit restraint. The increased use of monetary policy to reduce inflation—together with attendant rises in interest rates—has been a key factor. In contrast to the 1960s, when a low rate of inflation and stable interest rates permitted states and localities to raise funds for capital projects in the bond market, credit restraints over much of the past decade created an inhospitable climate for such borrowing. As a result, spending on capital projects sagged (chart at top of page 14).

During the past two-and-a-half years, moreover, high and volatile interest rates have caused state and local governments to postpone trips to the long-term debt market. Instead, they have turned increasingly to the short-term market through the issuance of bond-anticipation notes and tax-exempt commercial paper.

This shift to shorter maturities reflects a decision by state and local officials to carry on capital projects with short-term funds in the hope that long-term rates will fall. While long-term rates in recent months have eased somewhat from last year's levels, lately they have backed up again. In this climate, budget and financial planners remain reluctant to issue long-term debt at historically high rates. This reluctance—together with increased congestion in the short-term market—has had a depressing effect on all but the most essential capital projects.

Budget squeeze. Sluggish economic growth (which depressed state and local revenues from income and sales taxes) and a wave of tax-and-expenditure limitations that swept the country in the late Seventies also played a part in slowing spending for public facilities. Many juris-

Changes in Net Stock of Structures—And the Emerging "Gap"

(Average annual percent change in stocks in 1972 dollars, except for gap)

	1950-60	*1960-70*	*1970-80*	*Adjusted growth trend*	*1980-85*	*1985 Infrastructure gap (1972 $ billions)*
Total	4.4	5.1	2.0	2.4	0.7	182.2
Buildings						
Educational	6.9	6.1	1.5	1.6	−0.4	47.4
Hospital	3.1	2.4	2.4	2.6	0.2	8.4
Other (offices, police stations, courthouses, etc.)	4.6	6.4	3.9	5.0	1.6	37.3
Highways, streets, and bridges	4.3	4.6	1.0	1.0	0.0	45.9
Conservation and development	4.7	9.7	2.2	5.5	1.3	10.0
Sewer	4.1	4.1	4.9	4.4	3.1	15.2
Water	2.7	4.1	1.5	2.8	1.7	7.3
Other (transit systems, airfields, and public energy facilities)	1.6	6.1	3.5	3.7	2.5	10.7

NOTE: Net stock of structures is that of state and local governments, excluding housing. Adjusted growth trend is average annual growth over 1950-80 period for each component except highways and educational facilities; growth trend for those components is assumed to be the 1970-80 average in order to allow for completion of the interstate highway system and slowing in growth of the school-age population.

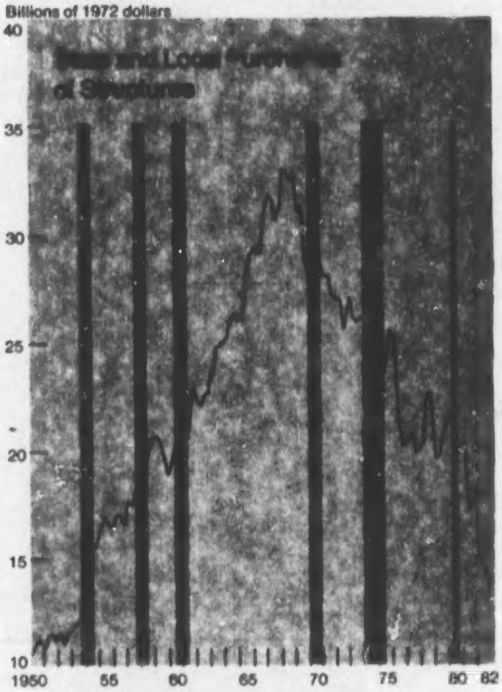
Projection to 1985 based on average growth in 1980-81 period.

Infrastructure gap represents the difference between value of capital stock estimated by using adjusted growth trend and value calculated at growth rate projected for 1980-85 period.

dictions, forced to adjust their budgets to meet essential services, curbed capital outlays. The capital budget typically is the first to be pared in any adjustment, since operating budgets have much larger and more vocal constituencies.

Federal grants. Even more important, the poor performance of public investment during the past decade also reflects swings in federal grants-in-aid—opening the spigot, turning it off, then opening it again. In an attempt to hold down federal spending, President Nixon early in the 1970s impounded funds appropriated by Congress (especially for highway and sewer construction). That restraint faded as revenue-sharing funds began to flow in 1973. During the 1974-75 recession, however, many states and localities funneled an increasing portion of revenue-sharing funds into income-support programs (such as Aid to Families with Dependent Children) and scaled back spending on capital projects. To offset these cutbacks, Congress passed a public-works grants program in 1976. But in the late 1970s, lawmakers—concerned about inflation and the budget deficit—cut back that program. More recently, cutbacks in construction grants have proceeded at an accelerated pace in response to the Reagan Administration's policy of spending restraint. The resulting yo-yo pattern in federal grants, shown in the chart at bottom of page 14, has disrupted capital-spending plans in countless communities.

In addition, Washington's regulatory proced-



NOTE: Shaded areas represent recessions as designated by the National Bureau of Economic Research.

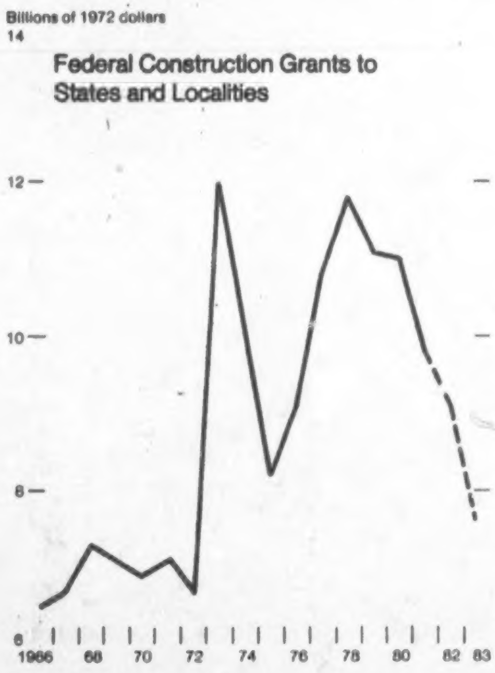
ures—aimed at monitoring state and local use of federal grants—often have had disruptive effects. While review of projects financed by the federal government is appropriate, the cumbersome process too frequently has resulted in lengthy construction delays and escalating project costs.

What to do

Clearly, repairing this country's crumbling infrastructure—and stemming further decay of public facilities—will be a huge task requiring massive resources. The repair bill for the nation's bridges alone, according to Transportation Department estimates, is $47 billion in current dollars. The bill for years of neglect in other areas is similarly large. Where will the money come from?

In May, President Reagan decided against seeking a proposed five-cent-a-gallon increase in the federal tax on gasoline. The $5 billion of revenue that such a tax would raise each year was to have gone for highway and bridge repair and for mass transit.

Despite the loss of revenue entailed, the President's decision is understandable. A gas tax increase, an unpopular move even in a nonelection year, would have had the undesirable effect of raising consumer prices at a time when official policy is aimed at reducing inflation. The task ahead, moreover, has grown beyond merely raising federal gasoline taxes a few pennies. In fact, the burden of financing improve-



NOTE: Fiscal years. Grants include that part of general revenue-sharing funds used by states and localities for construction.

ments in public facilities cannot be left to the federal government; states and localities need to shoulder most of the load.

Even so, there is room for improvement in the federal role. An important step would be for Congress to set up a public construction trust fund—financed by excise or other consumption taxes. The aim of such a fund should be to provide a more stable flow of federal grants to states and localities—reducing the uncertainties and disruptions associated with the swings in federal financing of the past decade. Such stabilization would encourage communities to undertake long-term, capital-intensive projects and better enable them to finance such projects in the bond market.

In addition, a national capital budget—which would set priorities for the rebuilding task—is an urgent need. It should be included in the regular budget submitted by the President each January. In conjunction with drawing up a national capital budget, the Administration should review federal regulatory procedures with the aim of streamlining the grant-approval process.

Similarly, efforts to improve state and local performance should include creation of capital-budget commissions to coordinate public-works activities at those levels of government. Even more important is the need for these units to come to grips with the financing of capital projects. During the past year, many state and local governments have levied new user fees to cover the costs of providing various public services, ranging from water delivery to recreational activities. In addition, many states are planning to extend the use of tolls on bridges and highways. User fees and the resulting flow of revenues should help to maintain access to credit markets for many of those jurisdictions.

Still, in many cases review of existing state and local taxes is needed to determine if they are achieving their original aim. Many states, for example, rely on vehicle-registration fees to finance highway improvements. Since these fees often are based on the weight of the auto, revenues have remained stable or have declined as cars have become smaller and lighter. To increase revenues, registration fees could be based on the sale price of the vehicle.

Recently, some jurisdictions have attempted to increase their cash flow by using sale/lease-back arrangements in which governmental units sell off property and lease it back. In addition, increased use is being made of grant-anticipation notes, letters of credit, zero-coupon bonds, and floating-rate bonds. Despite the proliferation of these financial innovations, however, states and localities will have to rely for the most part on traditional means of finance, such as general obligation and enterprise bonds. Such sources are especially suited to those areas where the needs are the greatest—municipal buildings, streets, and conservation projects.

Finally, public officials need to resist the tendency, demonstrated often in recent years, to transfer funds from the capital budget to the operating budget when revenue shortfalls occur. Such political expediency fails to face up to today's urgent needs and merely shifts the burden to coming generations. But time is running out for further postponement of capital spending; the bill for past neglect is now coming due.

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Economic Forecast. *Recovery is likely in the second half—fueled by lower interest rates, a freer-spending consumer. Still, a growth "ceiling" may hold GNP gains to 3% into 1983.* 1

Investment Slump. *Businesses are scaling back capital outlays—inhibiting economic recovery. Blame it on a chilly investment climate. Raised anew: concerns about a shrinking U.S. industrial base. Analysis of a key sector.* 4

Merchant Marine. *U.S.-flag cargoes keep shrinking. So does the number of shipping firms. Billions in federal subsidies haven't worked. Now the search is on for new approaches.* 10

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Economy Watch

THE third quarter seems to be getting off to a slow start. Despite the July 1 tax cut and the increase in Social Security benefits, consumer buying of both department-store goods and autos has been relatively subdued. And the government's July labor-market report confirms that cautious hiring practices persist. Nonetheless, with inventory liquidation moderating, and with the July 1 additions to personal income likely to be cumulatively supportive, the odds continue to favor a recovery during the second half of the year. Indeed, the rise in real GNP in the second quarter suggests that economic activity has passed its low point.

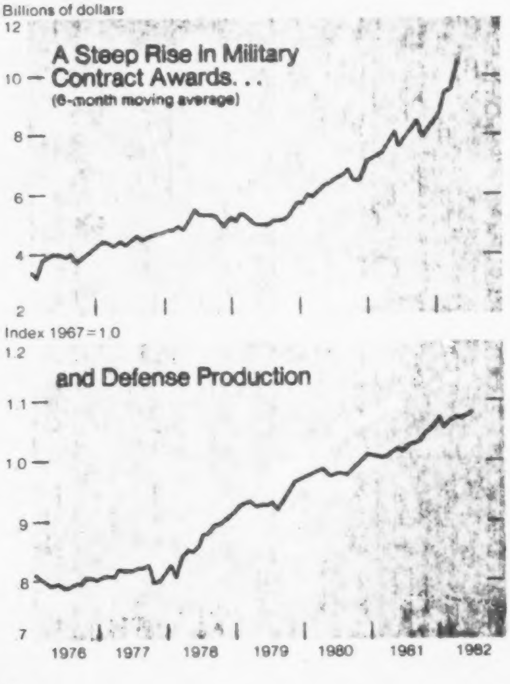
The recent dramatic easing in interest rates—sparked in part by two reductions in the Federal Reserve's discount rate and by increased reserve availability—boosts prospects for improved economic performance. It is reasonable to assume that these policy actions by the Fed reflected not only improved behavior of the monetary aggregates but also official concern about a weak economy. Barring a ballooning of the money supply in the weeks ahead, a growth-encouraging monetary policy seems likely for the immediate future. Lower interest rates are mainly responsible for the moderate upward revision in The Morgan Bank's economic projections for the second half (table on page 3).

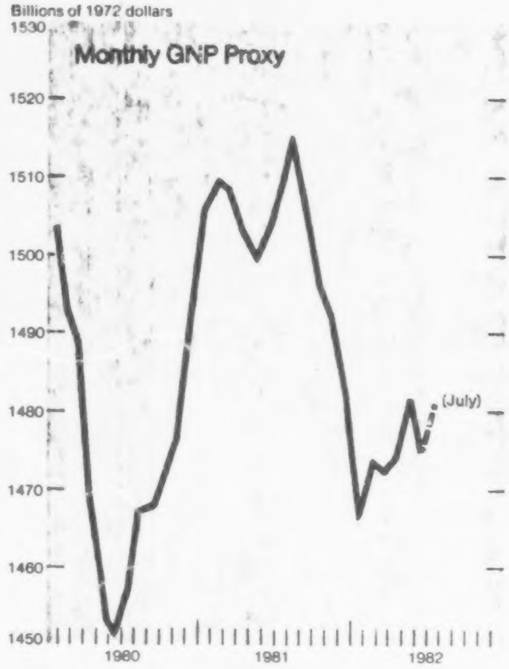
Three sectors—personal consumption, military spending, and housing activity—are expected to lift the economy in the second half.

The consumer has been counted on to spark a recovery, and in fact has proved to be a significant stabilizing force throughout the recession. Real consumer expenditures rose at an annual rate of 2.4% in the first quarter and at a 3.1% rate in the second—reflecting the first slice of the tax cut (effective last October) and the rise in purchasing power that resulted from reduced inflation.

In the current quarter, information is more sketchy, but what numbers are available are not especially reassuring. July auto sales did move up, but only slightly from the very depressed June level, and reports of major retail chains suggest continued softness in general-merchandise sales in July. It would be surprising, however, if the tax cut and the increase in Social Security benefits, which together raised personal income $40 billion at an annual rate, did not stimulate added consumer spending in the period ahead.

Just how much the stimulus to consumer outlays will turn out to be will depend on what part of the added income is saved. The saving rate has risen significantly in the past year. Among the reasons: the high rates of return available on savings instruments and a tendency for consumers to squirrel away funds because of concerns about unemployment, business failures, and general economic uncertainty.





NOTE: Proxy is derived by interpolation from quarterly GNP (actual and projected) on the basis of available monthly data.

The arms buildup will provide added lift for economic activity in the months ahead. Defense spending, after allowance for inflation, rose at a sharp 7.2% annual rate in the second quarter. This growth is likely to continue in the year ahead, given recent trends in defense contract awards and production (accompanying chart). Some analysts are cautioning that the steep rise in arms outlays poses a threat of bottlenecks and inflationary pressures in 1983.

The housing sector, meanwhile, has also begun to expand. Housing starts rose in both the first and second quarters and, despite some slippage in June, still appear to be trending upward—though continuation of high mortgage rates precludes a vigorous rebound.

Growing support from those three sectors, however, will be partially offset by continued deterioration in business fixed investment. Plant construction increased slightly in the second quarter, but investment in machinery and equipment fell 12.8% at an annual rate in real terms following a rate of decline of 7.7% in the first quarter. Nor are prospects promising, judging by the orders data. New orders for nondefense capital goods fell 15% in May and June to their lowest level since mid-1978. Indeed, as discussed in the article beginning on page 4, the outlook for capital investment is quite bleak.

Restrained recovery

Looked at in longer perspective—through the end of next year—the economy seems likely to experience rather subdued growth. For example, from the fourth quarter of this year through 1983 The Morgan Bank projects real growth on average of 3% at an annual rate. While that rate of growth compares favorably with the 1.6% average rate of the last five years, it is not sufficient to bring about a significant reduction in unemployment.

This bank's forecast is for a more restrained recovery than the Reagan Administration is projecting. Although the official view is certainly within the range of possibility, most private forecasters doubt that it is the most probable outcome, especially in light of the bleak prospects for business investment.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1982				*1983*
	Q1	*Q2*	*Q3*	*Q4*	*Q1*
Real GNP	−5.1	1.7	2.0	4.0	3.2
Real consumer spending	2.4	3.1	3.4	6.1	3.7
Real business-capital outlays	−5.0	−8.5	−11.6	−10.2	−5.8
GNP deflator	4.3	5.3	7.0	5.4	5.4
Consumer prices	3.2	4.3	8.2	4.2	6.2
Real disposable personal income	−1.9	3.1	5.6	2.5	3.0
Saving rate (%)	6.6	6.6	7.1	6.3	6.2
Housing starts (Millions)	0.9	1.0	1.0	1.1	1.2
Auto sales (Millions)	8.2	7.4	8.0	9.0	9.3
Unemployment rate (%)	8.8	9.5	9.7	9.6	9.6

NOTE: 1982 Q1 and Q2 data are actual.

Many private analysts also foresee a relatively subdued recovery because they anticipate that, as economic activity expands, the monetary aggregates will tend to rise—prompting Federal Reserve caution in supplying reserves to the banking system. The Fed's monetary targets seem unlikely to allow sustained growth in nominal GNP of more than about 9%. With approximately 6% inflation, that suggests a "ceiling" on real growth of not much more than 3%—unless inflation slows much more than is now generally expected.

Behind the Slump in Capital Investment

SO far, the contraction in business fixed investment has been fairly mild compared with those of past recessions. While real capital spending dropped on average by about 8½% during the six previous business cycles, the cumulative drop this time has been only about 3½%.*

Significantly, however, the current decline in investment is likely to continue well beyond the trough in over-all economic activity (accompanying table). In fact, most leading indicators of capital spending point to an investment contraction that will almost certainly turn out to be worse than the average investment slump since the end of World War II. Not only would such a development eventually deprive the recovery of a major source of support, it also would have serious implications for the evolution and ultimate vitality of the U.S. industrial base (box on page 6).

The latest Commerce Department survey of business spending intentions—conducted primarily in May—underscores the dramatic nature of the deterioration in the investment outlook. Moreover, recent indications suggest that spending plans have been pared significantly further this summer, apparently reflecting growing financial strains in the corporate sector.

The May survey showed that spending plans for 1982 were cut back by nearly 5% from the amount expected in February (table on page 5). This is the largest quarter-to-quarter reduction in business spending intentions since the survey began in the early Fifties. Although some of the reduction may well reflect a moderation of capital goods inflation—with investment price gains slowing to 4% in the first half from 6% in the last half of 1981—the slippage far outstrips the improved price outlook. Large cutbacks were apparent in virtually all industry groupings, but the manufacturing sector was especially hard-hit: Machinery, aircraft, petroleum, and paper industries reported particularly sharp downward revisions.

While surveys generally give accurate indications of business-spending intentions, the execution of such plans is reflected in data on actual spending commitments—orders for capital goods and contracts for business plant construction. Weakness is clearly evident in both areas—with nondefense capital goods orders off 17% in June from the year-earlier level and

Investment Cycles Since World War II

(Percent change over designated intervals)

Cycle	*Peak to trough*	*Four quarters after trough*	*Eight quarters after trough*	*Investment cycle lag*
1953-54	−3.9	9.9	19.2	0
1957-58	−14.4	12.9	14.9	2
1960-61	−3.8	7.4	10.1	1
1969-70	−6.9	3.0	15.3	0
1974-75	−16.3	5.3	17.8	1
1980	−6.1	4.7	3.6	0
Average	−8.6	7.2	13.5	1
1981-82 (proj.)	−10.2	2.5	n.a.	4

NOTE: Calculations derived from investment-specific turning points. Investment cycle lag is quarters elapsed between trough in aggregate activity and investment-sector trough.

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*The recent "benchmark" revision to the GNP accounts raised the level of real business fixed investment over the 1977-81 period. By the first quarter of this year, real investment was increased by $9 billion from the prior reading. However, most of this revision affects the period prior to the current recession.

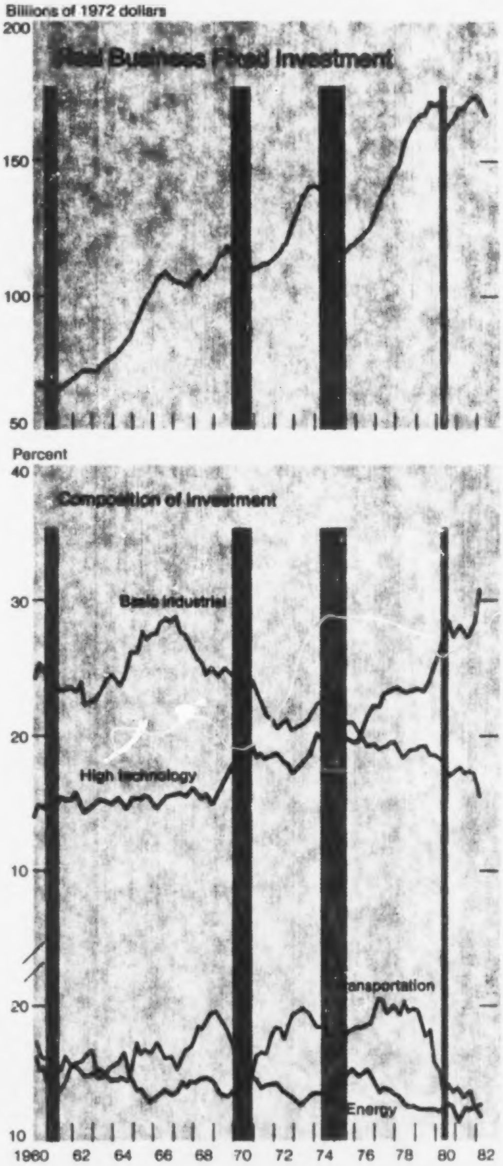
construction contracts for new business plant down a comparable amount over the same period. Given the normal lags between orders and equipment spending (four to six months) and between contracts and construction activity (nine to twelve months), capital spending should continue weak through the end of 1982. That same inference can be drawn from the Commerce plant-and-equipment survey, which shows little change in real investment in the second half of this year.

The flow of investment spending by type of equipment also suggests that the worst is yet to come. Although real equipment spending has dropped about 5½% since the third quarter of

Revision of 1982 Capital Spending Plans

	Feb. Survey	*May Survey*	*Revision*
	(Billions of dollars)		*(Percent)*
All industries	345.11	328.60	−4.8
Manufacturing	136.81	127.29	−7.0
Durables	67.24	61.17	−9.0
Machinery	27.51	25.65	−6.8
Motor vehicles	9.49	8.71	−8.2
Aircraft	7.25	6.18	−14.8
Nondurables	69.58	66.12	−5.0
Paper	6.75	5.91	−12.4
Chemicals	15.38	14.24	−7.4
Petroleum	28.96	27.89	−3.7
Nonmanufacturing	208.30	201.31	−3.4
Mining	18.33	17.24	−5.9
Transportation	13.53	12.57	−7.1
Public utilities	40.20	39.55	−1.6
Trade and services	90.48	88.79	−1.9
Communications	45.75	43.15	−5.7

SOURCE: Quarterly survey of business plant-and-equipment spending intentions conducted by U.S. Department of Commerce. Includes industries not shown separately.



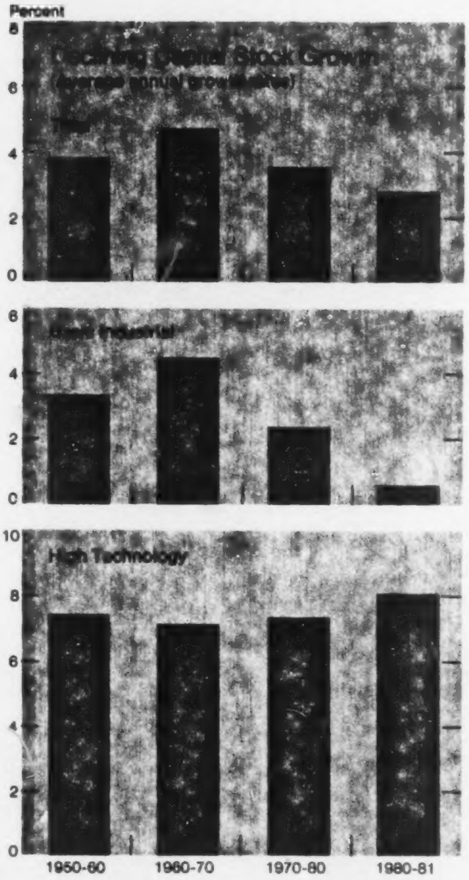
NOTE: High technology includes electrical machinery, computers, instruments, and communications facilities. Basic industrial includes nonelectrical machinery and industrial building. Energy includes public utility spending and oil and gas drilling. Transportation includes motor vehicles, aircraft, ships and railroads. Total business fixed investment includes categories not shown separately.

A NARROWING INDUSTRIAL BASE

THE Seventies witnessed a dramatic tilt in capital stock growth—away from "basic industrial" capital and into "high technology" investments.

Growth in basic industrial capital (mainly heavy machinery and industrial buildings) accounted for only 10% of the rise in business capital stock during the Seventies—less than half the growth contribution made on average during the previous two decades. By contrast, recent expansion of the capital stock has reflected a sharp acceleration of investments in high technology capital—computers, electrical machinery, instruments, and communication facilities. In the Seventies the contribution of such technology-based investment to the growth of total business capital stock doubled from that of the previous 20 years and was essentially three times as great as the contribution from basic industrial capital.

These trends underscore the dramatic evolution of the U.S. role in the world industrial economy—a clear shift into services and into highly specialized, technology-related activities. Given an obvious comparative advantage in this area, the momentum of high-technology investment is likely to continue in the United States. Against that background, concerns are starting to surface over the steady diminution of America's basic industrial capital. In particular, if current trends persist, a narrowing industrial base ultimately could raise fundamental questions about defense-production capabilities—particularly after a few years of recovery.



An added concern is the growing drain on capital investment funds just to replace an aging capital stock. The average age of the capital stock dropped steadily from 1950 (8.9 years) to 1970 (6.8 years). Since that time, however, the decline has stopped, with the average age rising slowly through 1981. That uptrend—together with a heightened need for businesses to comply with pollution-abatement and worker health and safety regulations—has

last year, weakness has been confined mainly to "lighter" machinery, such as electrical machinery, transportation equipment, and agricultural and construction machinery. The big drop in heavy machinery—operating with its normal cyclical lags—has just recently gotten under diverted investment away from capacity expansion efforts.

For example, in the Sixties about two thirds of total investment was directed toward replacing worn out capital facilities. That share rose steadily in the past decade. By 1981 the replacement share of capital outlays reached 80%—near a postwar high. Thus, both a depressed level of investment and shifts in the "mix" of such spending have imparted a downward bias to capital formation.

Changing Sources of Capital Stock Growth

(Based on constant-dollar net capital stock)

	1950 to 1960	*1960 to 1970*	*1970 to 1980*
	Billions of 1972 dollars		
Change in business capital stock	168.2	316.9	350.3
Attributable to:		*Percent*	
Basic industrial capital	22.1	22.7	10.3
Heavy machinery	12.8	13.5	9.0
Industrial building	9.3	9.2	1.3
High technology capital	16.3	18.3	34.5
Electrical machinery	10.6	9.9	14.7
Computers and office machinery	1.6	2.5	8.5
Instruments	1.5	2.8	7.8
Communication facilities	2.6	3.1	3.5
Energy capital	19.2	6.3	9.6
Extraction	6.7	0.4	3.4
Generation	12.5	6.0	6.2
Transportation capital	−1.0	9.9	11.8
Motor vehicles	1.8	6.8	10.1
Other	−2.8	3.1	1.7
Other	43.4	42.7	33.9

way. Similarly, spending on construction was maintained fairly well through the second quarter, but some weakness was evident in industrial building, electric utility construction, energy exploration, and farm building. While the falloff of industrial building has come a bit more quickly than usual in this cycle, a major correction still appears likely for commercial and office building as well as in some of the traditionally less cyclical areas of construction activity—for example, building for religious and educational institutions.

Sources of deterioration

A key question is why the capital-spending collapse is coming now, just at a time when the rest of the economy appears to be hitting bottom. The answer requires a look at the interaction among a variety of investment determinants—ranging from interest rates and profits to taxes and capacity utilization. In an effort to identify the unique features of the current investment cycle, the table on page 8 contrasts the present state of major investment determinants with their "typical" behavior at previous cyclical troughs. Among the major findings:

Capacity utilization. The operating rate of existing plant and equipment—that is, output per unit of productive capacity—is a good barometer of the need to expand existing capital stock. When utilization rates get "high"—moving into the 80%-to-90% zone—the growing intensity of capital usage suggests that investment in new plant and equipment is likely to be quite profitable. Conversely, low operating rates imply a limited need for adding to capacity. But businessmen look at more than just the level of capacity utilization. Indeed, expectations of growth in demand (or real output) are an important consideration in assessing a future level of capacity use—a factor that has a crucial influence on the ultimate profitability of any new investment. From either standpoint, investment prospects remain poor. In the first half of this year, operating rates in the manufacturing sector—at about 70% of capacity—were well below those at most prior troughs. Indeed, the longer output lingers at the current trough—as it did over the first six months of the year—the more expectations suffer regarding increases in future capacity use and projected investment needs.

Cash flow and profitability. Business needs for new fixed capital must, of course, be judged against the affordability of such investment programs, and the ability to generate investment funding internally is a significant aspect of any affordability test. By this standard, as well, investment prospects look grim. The drop in real profits has been much sharper over the past year than declines at previous cyclical troughs. Offsetting this earnings squeeze has been a greater-than-typical rise in depreciation allowances, reflecting last year's enactment of the Accelerated Cost Recovery System. This development has also resulted in a sharp reduction in effective corporate tax rates. Even so, the increasing inability of corporations to generate earnings from current production puts tremendous pressure on business investment.

Interest rates and balance sheets. The debt market is an obvious alternative to the internal generation of investable funds. But the current inhospitable climate in the corporate bond market effectively rules out that choice as a significant funding option for most companies. Nominal bond rates are over twice as high as they normally are at cyclical troughs, and, as the table shows, the disparity in real terms is considerably greater. Indeed, the bond market has not accommodated significant longer-term borrowing requirements of the corporate sector in well over two years. As a result, corporate balance sheet strains have multiplied, with the ratio of short- to long-term debt near its postwar high in the second quarter of this year. Thus, despite the recent improvement in inflation, the need to overhaul the structure of corporate balance sheets is likely to be one of several factors that keep bond rates on the high side for some time to come. Mounting federal borrowing requirements, together with short-term interest rates that remain historically high, should also act to put steady pressure on bond rates—unfortunately setting the stage for a protracted period of high-cost, externally funded debt capital.

Stock prices. While equity funding is a third option for financing capital investment programs, the stock market's performance over the past year can hardly be judged encouraging. Indeed, the roughly 13% drop in average share prices is, with the exception of the 1974-75

Investment Fundamentals at Cyclical Troughs

	Average of previous 6 cyclical troughs	*1982*	
		Q1	*Q2*
Capacity utilization			
Manufacturing (%)	75.7	71.6	70.3
Real corporate profits (% change from year earlier)	−18.2	−26.8	−22.3*
Real corporate depreciation (% change from year earlier)	4.7	9.2	11.7
Corporate tax rates (%)	42.1	32.5	32.7*
Bond rates: AAA			
Nominal (%)	6.4	15.0	14.5
Real* (%)	1.9	6.5	6.3
Stock prices: S&P 500 (% change from year earlier)	−2.3	−13.2	−14.0

***Estimated.**

bear market, the sharpest and most drawn-out cyclical correction in postwar experience. Moreover, the depressed level of stock prices—with shares of many companies selling below book value—presents an added obstacle to capital investment. The reason is that acquisition of a company often is more attractive than is an investment in new plant and equipment. Finally, many businessmen view the stock market as a broadly based investment barometer: To the extent that the stock market's valuation of outstanding equity shares exceeds the replacement cost of existing productive capacity, investment growth will be encouraged. From this more general perspective, recent stock market trends are particularly ominous for capital investment prospects.

Unique circumstances

Thus, a look at a broad array of investment determinants shows the current environment for capital spending to be distinctly less promising than at comparable stages of past business cycles. The one factor that most sharply distinguishes this cycle from its predecessors is that the current downturn in economic activity has not yet generated a meaningful easing of financial pressures on the corporate sector.

During this recession, interest rates have remained stubbornly high. Recently, to be sure, short-term rates have eased dramatically, but long-term rates—a key to investment funding strategies—have changed little. Real corporate bond yields, for example, reached a record level in the first half that was more than 40% higher than the previous peak attained only two and a half years earlier.

Clearly, high bond yields have forced a growing reliance on short-term credit as a substitute for long-term debt funding. The continued servicing of such debt puts a steady and mounting strain both on balance sheets and on corporate earnings. This, in turn, has led to a general weakness of equity prices. As a result, high bond yields have not only directly closed off one option for financing investment programs but also have indirectly choked off the equity and cash-flow options as well.

The near-term investment outlook needs to be set in the context of longer-term evolutionary forces which could also bear importantly on capital formation trends. The ratio of capital costs to labor costs is one such factor. Over the broad sweep of postwar experience, investment "booms"—such as that of the Sixties—have been associated with favorable movements in the price of capital relative to the price of labor. From 1947 through 1972 the implicit "price" of the capital stock dropped relative to labor costs. Unfortunately, in the past decade that trend has not continued: The price of capital relative to labor in 1981 was no lower than it was ten years earlier. And the ratio in all likelihood would be even less favorable if sharply increased financing costs were taken into consideration.

Other longer-term influences on investment trends are more positive. With a sharp slowing of capital stock growth in the past decade, pent-up investment needs have grown increasingly intense. Moreover, investment for some companies also is likely to be boosted by the defense buildup and by industry's continued needs for energy "retrofit"—that is, reductions in the energy consumption of existing capacity.

However, while the longer-term outlook for investment suggests some promise far down the road, the short-run impediments to a resurgence in capital spending remain overwhelming. All in all, the capital spending outlook appears bleak for some time to come.

A New Course for the Merchant Marine

THE Merchant Marine Act of 1970 was the latest in a long line of legislative efforts to increase the U.S. share of oceanborne trade and to improve the lagging efficiency of U.S. shipbuilders. But a dozen years and $5 billion in direct subsidies* later, neither goal has been accomplished. On the contrary, the U.S. merchant marine industry has slipped even farther behind that of other shipping nations.

For example, U.S.-flag ships (those which are majority owned by American companies and which are registered in this country) have seen their share of U.S. oceanborne foreign trade–exports and imports–steadily decline. Thirty years ago the U.S. fleet carried more than 40% of the tonnage. By 1980 that share had dropped below 4% (accompanying table). The U.S.-flag share of the cargoes based on dollar value, it is true, topped 14%–reflecting high-value goods carried in this country's big container vessels. But even so, the U.S.-flag dollar-value share in 1980 was only about half as large as in 1960.

Now the search is on for new ways to rejuvenate America's shipping power. The Reagan Administration wants to cut back on subsidies and to reduce maritime regulation, giving shipowners more freedom to compete in world markets. Congress is considering legislation aimed at "removing constraints, uncertainties, and administrative burdens" that place American ocean carriers at a competitive disadvantage.

U.S. Oceanborne Foreign Trade

	Millions of tons	*U.S.-flag share (percent)*	*Dollar value (billions)*	*U.S.-flag share (percent)*
1960	277.8	11.1	24.7	26.4
1961	272.3	9.7	24.6	25.6
1962	296.7	10.0	25.8	25.1
1963	311.5	9.2	27.5	25.1
1964	332.8	9.2	30.0	25.8
1965	371.2	7.5	32.4	21.4
1966	404.0	7.2	36.4	22.5
1967	387.5	5.3	36.6	21.7
1968	418.6	6.0	41.0	20.7
1969	427.4	4.6	41.8	19.3
1970	473.2	5.3	49.6	20.7
1971	457.4	5.3	50.4	19.6
1972	513.5	4.6	60.5	18.4
1973	631.5	6.3	84.0	18.9
1974	628.9	6.5	125.2	17.7
1975	615.5	5.1	127.5	17.5
1976	698.7	4.8	148.3	17.8
1977	775.3	4.5	171.1	16.4
1978	775.6	4.1	195.8	15.7
1979	823.1	4.2	242.1	14.7
1980*	770.0	3.6	293.7	14.4

*Preliminary
SOURCE: Maritime Administration.

In addition to economic considerations, the "national security" aspect often is stressed. This argument is that the nation's merchant fleet is the "fourth branch of the military," because merchant ships in time of war are vital to national defense. A declining merchant marine is seen as a threat to national security.* Not everyone agrees with such claims, but it is generally conceded that a continued decline in the merchant marine could have implications beyond mere economic losses.

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*In addition, the government has provided indirect assistance in the form of loan guarantees, tax deferments, and preferences for carrying government-sponsored cargo. Such aid is estimated by the Office of Management and Budget at $400 million to $500 million a year.

*Opponents of aid to the merchant marine on national security grounds argue that, in addition to the U.S.-flag fleet, nearly 500 ships registered in "flag-of-convenience" countries such as Panama and Liberia are effectively controlled by U.S. owners and that, in wartime, the Pentagon legally could commandeer such ships.

Slipping behind

The slippage in the U.S. position in maritime trade is evident not only in cargo share but also in the number of ships involved. The U.S. merchant fleet now numbers 569 vessels, ranking eleventh among major world fleets (accompanying table). Thirty years ago the U.S. fleet numbered 4,000 and ranked No. 1.

A decade ago, there were nineteen U.S. companies with merchant-liner fleets. Today there are only nine.

Steady decline of the U.S. merchant fleet can be traced in important part to crew costs. U.S.-flag ships, by law, must hire American crews—at labor costs that are at least double those of other nations. As the table on page 12 shows, a captain on a U.S. merchant vessel receives in pay and benefits, on average, more than $17,000 a month, double the compensation of a Swedish master and nearly six times that of a Korean counterpart. Similar differentials apply for other ship officers and seamen.

Not only are American merchant crews the highest paid in the world, larger crews are required on U.S. ships than on ships of other nations. The table on page 13 shows that U.S. crews often are 25% to 40% larger*—though recently crew sizes have begun to decline on some types of U.S. merchant ships. One result is that, over the years, U.S. shipowners have registered their ships in other countries under "flags of convenience" (for example, in Panama and Liberia) in order to hold down crew costs.

Major Merchant Fleets

	Number of ships	*Rank by number of ships*	*Millions of dead-weight tons*	*Rank by dead-weight tonnage*
Liberia	2,380	3	158.7	1
Greece	2,876	1	63.5	2
Japan	1,751	5	61.2	3
United Kingdom	1,110	6	41.9	4
Norway	632	9	39.5	5
Panama	2,347	4	35.3	6
U.S.S.R.	2,512	2	21.6	7
United States (privately owned)	569	11	20.5	8
France	359	17	19.9	9
Italy	624	10	18.5	10
Spain	506	12	12.7	11
West Germany	502	13	12.5	12
Singapore	667	7	12.3	13
China	645	8	9.4	14

SOURCE: Maritime Administration.

Reflecting high U.S. crew costs, comparisons of this country's shipping charges with those of other nations are dramatic. For example, shipping wheat from this country to Egypt on a U.S.-flag vessel costs $122 a ton. A Greek ship could do it for $30 a ton.

Another aspect of the decline is that construction of merchant vessels in U.S. yards has fallen far below expectations. The goal for the Seventies, as set forth in the Merchant Marine Act of 1970, was 300 ships. Only about 80 ships were contracted for through 1979.

Again, a significant factor is costs that far exceed those abroad. For instance, a 40,000-

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*A study for the Maritime Administration, which reviewed the manning on subsidized and nonsubsidized vessels, found that union agreements concerning manning levels on U.S.-flag vessels push crew costs up 42% compared with costs for a crew meeting Coast Guard minimum safety requirements.

ton bulk-cargo ship would cost roughly $66 million here. The Japanese price for such a vessel would be about $22 million. To build a container ship in this country would cost about $90 million—compared with $43 million in Europe and $38 million in South Korea. With price differentials like those, shipowners have decided that they cannot afford to build in the U.S.

The bigger price tags on U.S. ships reflect both high wage costs and lagging productivity. Delivery times for U.S.-built ships, for example, often have exceeded foreign deliveries by two years or more. Part of the blame may be attributed to outmoded equipment. Concluded a recent study by the Maritime Administration: "U.S. shipyards, on the average, are using a lower level of technology than foreign shipyards in six of eight categories studied."

American shipbuilders have acknowledged that foreign builders are more efficient in many ways. For example, the 1981 annual report of the Shipbuilders Council of America noted: "There can be opportunities to emulate the Japanese: more middle managers experienced in industrial engineering, more coordination between production control and material procurement, . . . more effective planning, scheduling, and production. . . . The potentials for improvements in efficiency, productivity, and costs are obviously substantial."

For decades, Congress has used the subsidy approach to make up the big difference between costs of building and operating ships in this country and costs abroad. Since 1936, direct subsidies alone have totaled more than $9 billion, according to the Office of Management and Budget. Last year operating subsidies amounted to $300 million. Construction subsidies—50% of the cost of ship construction—amounted to $200 million in 1979.

Monthly Crew Costs

	*Average Compensation**		
	Master	*Second engineer*	*Seaman*
United States	$17,387	$8,212	$3,301
Japan	9,705	4,820	3,643
West Germany	7,401	4,174	2,200
Sweden	8,695	4,813	2,605
Denmark	5,945	2,899	2,428
Korea	2,800	905	644
Taiwan Chinese (Panamanian flag)	2,505	1,295	770
Hong Kong Chinese (Liberian flag)	2,708	1,293	721
Ghana	2,062	1,610	442

*Including pay and fringe benefits.
SOURCE: Office of Management and Budget.

Until last year, U.S. shipping companies could not qualify for operating subsidies unless they built their ships in U.S. yards. Congress has authorized such subsidies for ships bought abroad if construction subsidies are not available. There is now a movement in Congress to authorize operating subsidies for such ships in all cases. Significantly, United States Lines recently was reported to have ordered fourteen container ships from South Korea.

High-seas competition

Given the drastically dwindling role of U.S.-flag carriers, what corrective steps need to be taken?

At the outset, it needs to be recognized that world shipping is far from a free market. All major trading nations subsidize their merchant fleets and try to protect their operations.

For example, in Europe and elsewhere rival shipping companies form "closed conferences" —really cartels—in which prices may be fixed, cargoes pooled, sailings limited, profits shared, and rebates given to participating shippers.

U.S. antitrust laws prohibit owners of U.S.-flag ships from using such practices. However, they can participate in "open conferences" (allowing shipowners from any nation to join), with the approval of the Federal Maritime Commission, in order to set shipping rates.

Senator Slade Gorton (Washington) and Representative Mario Biaggi (New York) have introduced legislation in Congress that would give U.S. shipowners more freedom to band together. Antitrust immunity under the proposed legislation would allow U.S. shipowners to set prices, pool cargoes, and share profits as many foreign companies do. This approach apparently has the backing of the Reagan Administration, which has indicated a number of other measures that it believes will help restore health to the merchant marine. Among them:

- Phasing out of subsidies. It is felt that subsidy payments have enabled U.S. ship operators and builders to go along with excessive wage increases. The Administration has ended subsidies for ship construction, and it has refused to review new applications for wage subsidies.
- Encouraging foreign investment in U.S.-flag ships. The share that foreigners can own in a corporation acquiring a U.S.-flag ship would be raised to 75% from the present 49%.
- Reducing maritime regulation. Shipping rules now prevent carriers from quickly adjusting their rates and services to market conditions. Which rules will be altered—or abandoned—has yet to be specified.

The issue of American crew costs—the highest in the world—needs immediate attention if American vessels are to become more competitive. In the eyes of many analysts, the requirement that U.S.-owned and registered ships must be manned by American crews is a severe handicap. Avoiding that rule, as noted, is behind the heavy registration of U.S.-owned vessels in foreign countries under flags of convenience rather than under the U.S. flag. Ending—or scaling back—the U.S.-crew requirement would run into very stiff opposition, of course, from maritime unions. But, in a competitive world, that rule and others have simply priced U.S. vessels out of the market, posing a threat to the U.S. maritime industry's survival.

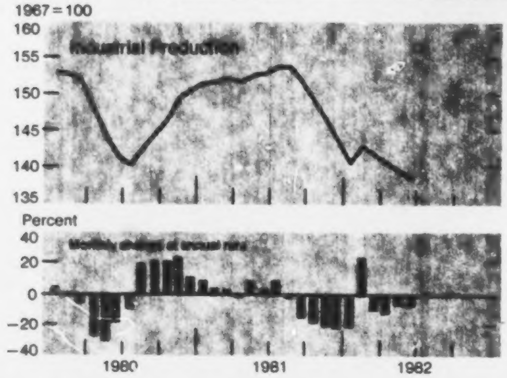
Clearly, this nation's merchant marine program—replete with subsidies and encumbering regulation—has failed to revitalize the industry. A different approach is long overdue.

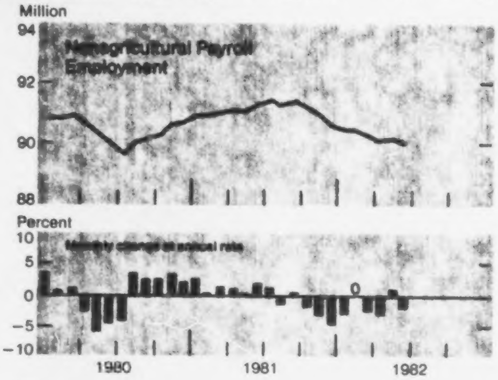
Crew Sizes Compared

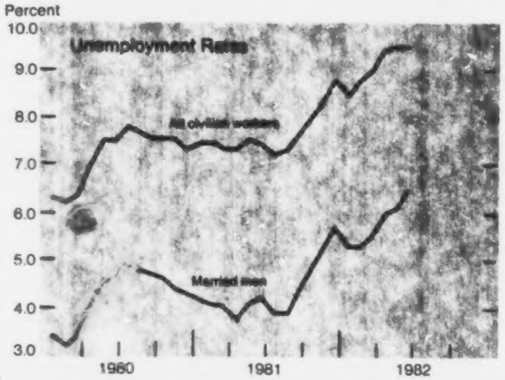
Ship type	*Country*	*Crew size*
Container ships	Japan	25
	Germany	34
	United Kingdom	34
	France	23
	United States	37-45
Roll-on/roll-off dry bulk cargo vessels	Norway	18
	United Kingdom	36
	United States	40
Barge-carrying ships	Germany	26
	Norway	30
	United States	32-38
Standard cargo ships	Japan	34
	Germany	22
	United States	34-36

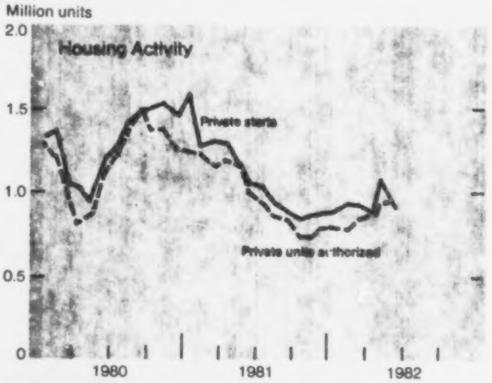
SOURCE: Office of Management and Budget.

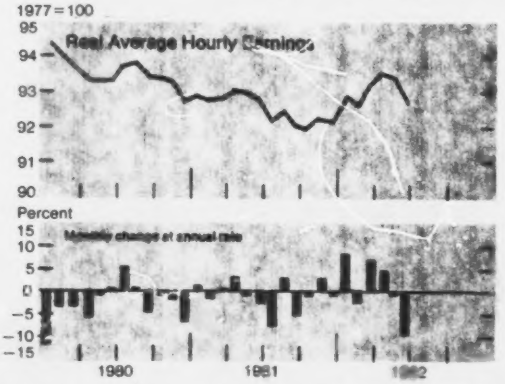
ECONOMIC INDICATORS

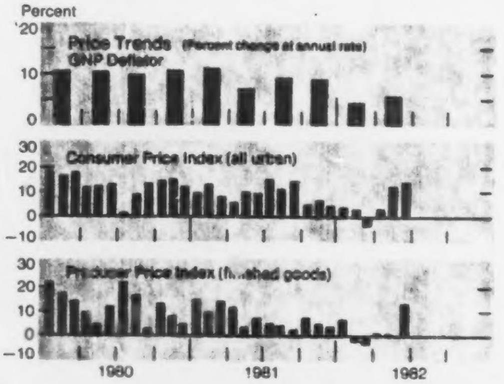






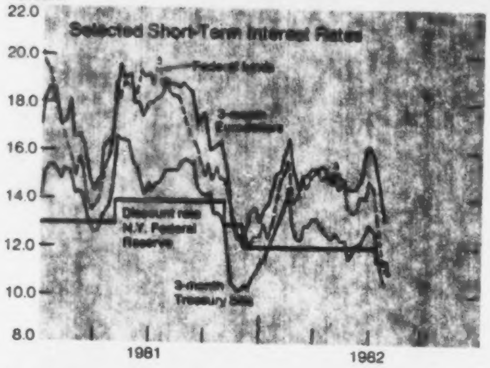


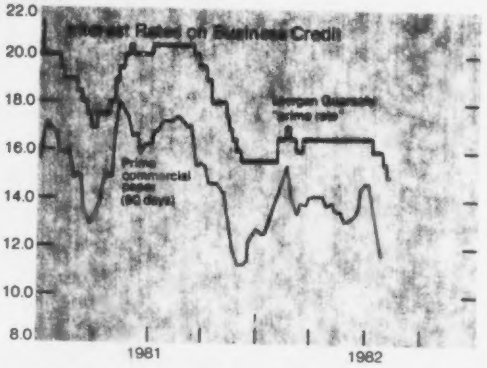


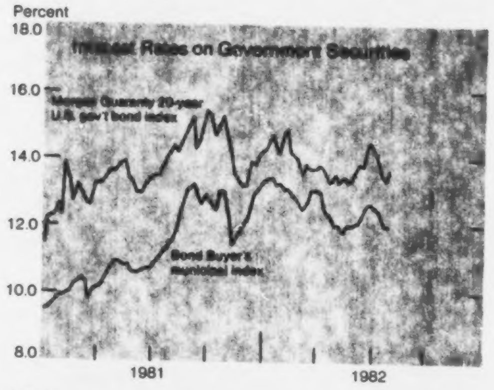


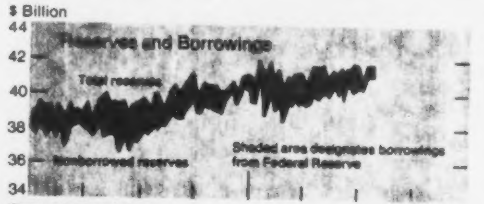
NOTE: All data are seasonally adjusted. Hourly earnings are adjusted for overtime in manufacturing and for interindustry employment shifts.

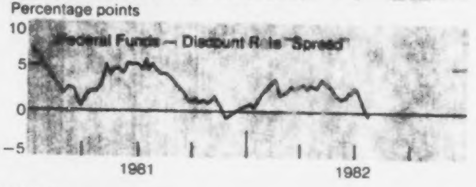
MONETARY INDICATORS

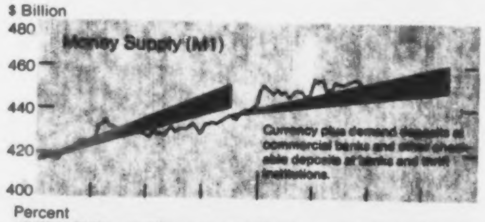


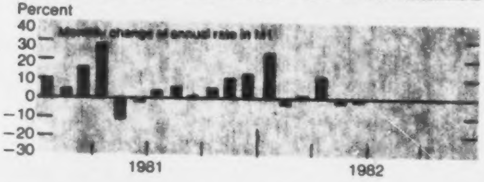


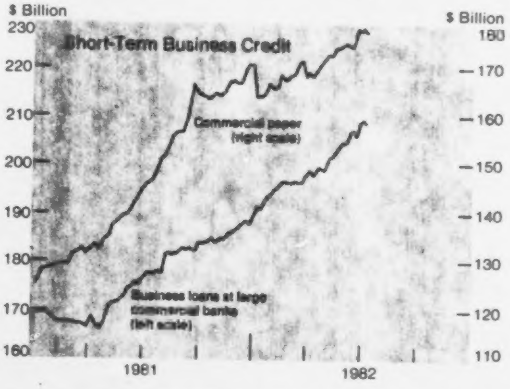












NOTE: Shaded areas on the money supply chart represent the Federal Reserve growth targets for the periods from the fourth quarter 1980 to fourth quarter 1981 and from the fourth quarter 1981 to fourth quarter 1982. Business loans are net of bankers' acceptances. All data except interest rates and member bank borrowings are seasonally adjusted.

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Credit Flows. *Treasury borrowing up, business borrowing down, consumers holding even. That's the second-half prospect. Credit demand by sector—and implications for markets.* *1*

Economy Watch. *Little headway is being made. Third-quarter real GNP will likely be flat, followed by subpar gains into 1983.* *5*

Productivity. *New signs of improvement in productivity—reversing a slump in the late 1970s. But problems linger.* *7*

Defense Sharing. *U.S. spends 6% of GNP meeting defense commitments. NATO nations fail to meet growth objectives for defense set in 1978. Critics charge a "free ride" for Europe and Japan.* *8*

Economic Indicators. *14*

Monetary Indicators. *15*

The Outlook for Credit Markets

THE unexpectedly weak economy and the Federal Reserve's recent monetary easing have dramatically changed the outlook for financial and credit markets. Only a short time ago it seemed likely—largely because of the mid-year tax cut and strong defense spending—that the economy would turn around without much inducement from monetary policy. Now, however, there are lingering signs of sluggishness (Economy Watch, page 5). And, despite the dramatic decline in short-term interest rates, there is less confidence that recovery will become well established this year.

Demand for credit in the second half will reflect the continued economic doldrums. Business borrowing will decline from last year's second half and consumer borrowing will just about match its year-ago pace. But Treasury borrowing, reflecting in part a sag in tax revenues because of the recession, will balloon to more than $100 billion—almost double borrowing in the last half of 1981.

Total credit demand in the second half will reach an estimated $270 billion—up $48 billion from the first half and about $40 billion higher than in the last half of 1981 (table on page 2).

Federal borrowing. Treasury borrowing requirements in the second half of each year are normally much greater than in the first half. The key reason is that individuals and corporations make sizable final payments on each year's tax liability during the first half of the next year. This was especially true in 1982's first half, when companies made unusually large catch-up tax payments to avoid the stiffened late-payment penalties introduced at the start of the

The Demand for Credit

(Billions of dollars; not seasonally adjusted)

	1980		*1981*		*1982**	
	First half	*Second half*	*First half*	*Second half*	*First half*	*Second half*
Federal government issues	24.7	55.1	33.5	54.3	42.0	103.0
Federal agency issues	21.7	20.7	19.7	24.3	25.0	26.0
State and local government issues	9.0	17.8	12.3	13.5	13.0	16.0
Mortgages	52.4	68.7	53.1	45.7	35.0	40.0
Corporate and foreign bonds and notes	25.1	13.3	13.7	11.2	15.0	25.0
Other business borrowing (nonfarm)	40.1	26.7	70.8	53.4	72.0	25.0
Consumer credit	– 10.2	12.5	6.3	19.0	0.0	20.0
All other credit	12.9	23.8	16.8	7.5	20.0	15.0
Total credit demand	176.0	238.5	226.3	229.0	222.0	270.0

*Estimated. Due to rounding, components may not add to totals.

year. Thus, despite the recession, Treasury borrowing in this year's first half, at $42 billion, was only one fourth higher than in the first half of 1981.

In the second half of this year, Treasury borrowing is likely to total some $103 billion, nearly twice the amount raised in last year's second half. The Treasury's needs will be enlarged this year by the impact of the recession as well as by the 10% personal tax cut that took effect in July. Total federal borrowing, including some $26 billion of issues by federally sponsored credit agencies, will absorb $129 billion, or an estimated 48% of net credit extension–more than in any six-month period since 1953.

Business financing. Despite the liquidation of $13 billion of inventories in the first half of 1982, business borrowing during the period was some $1 billion higher than during the first half of 1981, when business added $7 billion to its inventories. In part, this reflects the fact that the catch-up tax payments that curtailed government borrowing raised the business sector's need for funds.

In previous *Survey* discussions of the outlook for corporate borrowing, total business financing activity for 1982 has been forecast to decline from that of last year.* Despite the strength of business borrowing in the first half of the year, a decline for the year as a whole still seems reasonable. The gap between business inventory and investment outlays, on the one hand, and retained cash flow on the other, has narrowed substantially this year. During the rest of the year, corporate borrowing should be curtailed, in particular, by the much reduced level of business-tax obligations that is a byproduct of recent tax reductions and the depressed state of corporate profits. Significantly, there has been a noticeable slowing in the last several weeks in the growth of short-term borrowings by both financial and nonfinancial corporations. This abatement of corporate borrowing–which is expected to continue--shows up in the sharp curtailment of

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*"Financial Markets in 1982," *The Morgan Guaranty Survey*, February 1982; "Business Borrowing: Set to Decline," *The Morgan Guaranty Survey*, May 1982.

"other business borrowing" in the table on page 2.

State and local. States and localities are issuing securities at an increased pace, partly because the recession has cut into their revenues and partly because of state and local efforts to help support local construction activity through housing-finance bonds. These bonds, the proceeds of which are used to provide relatively low-cost mortgage financing, were issued in only limited volume in 1981 because of federal restrictions. These restrictions have since been eased, and the volume of housing-finance issues in the first seven months of 1982 was larger than the total for all of 1981. The projections of state and local borrowing in the table on page 2 assume that the recent pace of housing bonds will continue.

Consumers. Net consumer borrowing was very close to zero in the first half of this year, because of seasonal influences and the impact of the recession. In the second half, however, the rate of consumer borrowing is likely to approximate that in last year's second half. A key factor will be the pace at which consumer-loan rates are adjusted downward in response to the reductions which have occurred in money-market interest rates—possibly helping to spur an increase in interest-sensitive consumer purchases such as automobiles. However, there is relatively little basis in past experience for anticipating the speed at which such adjustments will occur. Consumer-loan rates are much freer now of usury ceilings than in the past, when such rates almost always stayed at their legal maximums.

Mortgage credit. Mortgage-loan volume should eventually begin to reflect the upturn in multifamily housing starts that has recently occurred. Mortgage-rate reductions are likely to follow this summer's declines in market interest rates, helping to sustain a higher level of housing activity in both the new-home and resale markets. It will probably take several months, however, for net new-mortgage volume to reflect increased housing activity. Thus, in the second half of this year, mortgage-credit demand is likely to be below the level in the second half of 1981. Indeed, reflecting the prolonged weakness of housing markets, mortgage-credit demand in all of 1982, at $75 billion dollars, is likely to represent a mere 15% of total credit flows—the smallest share in all of the years that the Federal Reserve has been tabulating statistics on the flow of funds.

Market effects

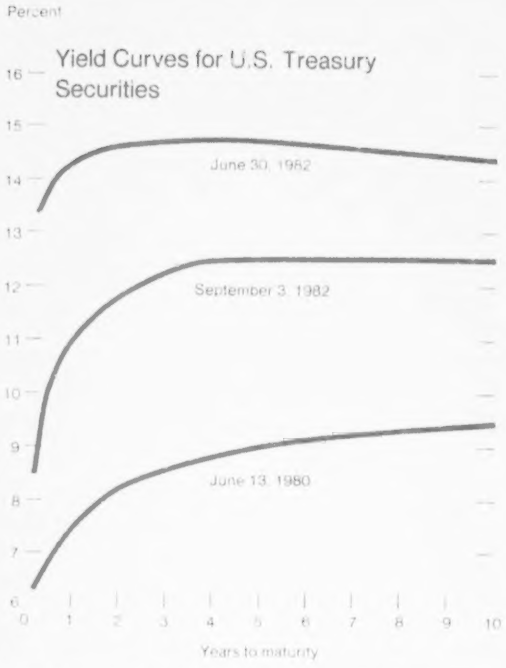
Taken by themselves, the estimates of credit demand summarized above suggest that heavy government borrowing requirements will prevent significant reductions of interest rates in 1982 and could even lead to higher interest rates. Nevertheless, interest rates recently have plummeted—at almost precisely the same time that the federal government's demand for funds has surged.

A limited easing of monetary policy is one factor behind this summer's rate reductions. But what also seems to have happened is that saving flows are again rising, after having flattened out earlier in the year. Gross personal saving, which was unchanged in the first half of this year from 1981's last-half rate, seems to be heading for a $17-billion increase (at an annual rate) in the second half. Other sources of saving—corporations, state and local pension funds, and foreigners—all seem likely to make substantially more money available in the current six-month period than earlier in the year.

Recent interest-rate reductions have been greatest on short-maturity instruments, creating a very steep yield curve (chart on this page). Five-year government securities, for instance, were yielding about 12.35% earlier this month, compared with about 11% on one-year securities and roughly 8.5% on three-month bills.* That is about as steep as the yield curve has been in years—steeper, for instance, than in mid-1980, following a 10 percentage-point reduction in short-term interest rates in the prior three months. At that time, the interest-rate spread between three-month bills and five-year securities was about 300 basis points.

Over the next several months, if short-term rates remain at or close to current levels—a reasonable expectation, given the outlook for subpar economic performance—it is likely that investors holding short-term money-market instruments will become increasingly willing to reach out to longer maturities in the quest for higher yields. That process is likely to increase the market for intermediate- and long-term government securities and also for the issues of high-quality corporations. Such a reaching out is the best hope corporations have had in a long while for lengthening the maturities of their liabilities through bond and note issues. Indeed, the volume of such issues has already started to rise in response to this summer's interest-rate reductions. And the projection of business borrowing shown in the table on page 2 reflects the beginning of a shift by the business sector toward longer maturities.

But, with corporate balance sheets sorely in need of such restructuring, a critical issue for the future is the access that corporations will have to the medium- and longer-term markets once economic growth is rekindled by the lower level of short-term interest rates. The sensitivity of longer-term rates to the recent change in the monetary environment suggests that the opportunity to issue bonds could diminish again if—in response to an economic upturn—accelerating money growth obliged the Fed again to restrict reserve availability, driving short-term interest rates higher. Nonetheless, long- and short-term rates could move in opposite directions for a considerable period—with long rates failing to follow short rates higher.


Yield Curves for U.S. Treasury Securities

NOTE: Treasury bill rates included on a bond equivalent basis.

For that to happen, however, further federal-spending restraint and budget cutting will be essential. Despite the 1982 tax law, which will raise government tax receipts $98.3 billion through fiscal 1985, huge deficits are in prospect for the foreseeable future. The recent easing of interest rates demonstrates that they depend on more than just the level of credit demand and the balance between federal and private-sector borrowing. But it is equally clear that heavy federal borrowing can conflict with the expansion of private-sector borrowing requirements that a recovering economy typically produces.

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*Bond-equivalent yield.

If Congress takes further steps to reduce prospective budget deficits—which inevitably will mean some change in the politically sensitive entitlements programs—there is ample reason for anticipating long-term rates to continue moderating and corporate debt restructuring to proceed well into 1983.

Economy Watch

THE economy is struggling to get ahead, but without much success. August payroll employment showed continued deterioration. Consumers remain cautious in their spending despite the July tax cut. And business capital investment continues to be a major source of weakness.

From all sides, summer business activity has proved to be less upbeat than expected. Indeed, for the third quarter as a whole, real GNP seems likely to be essentially flat (projections on page 6).

The unexpected hesitancy of consumer spending has been the principal source of surprising weakness this summer. This apparently reflects unease over a 41-year high in unemployment and almost daily reminders of the fragile financial situation among some domestic and sovereign borrowers.

To be sure, the fact that interest rates have fallen dramatically from their early summer levels is a positive element. Big as the rate decline has been, however, it still leaves interest rates (especially intermediate- and longer-term rates) too high to permit a confident judgment that interest-sensitive activities such as housing and autos will be boosted over the near term. A significant depressant has certainly been moderated but it is not clear that rate levels have moved down enough to sustain a recovery.

The unexpected softness of the economy during the summer raises an obvious question as to whether monetary and fiscal policy are appropriately geared to the realities of present business conditions. In the case of monetary policy, the big issue is whether the targets for permissible money growth specified by the Federal Reserve are generous enough to accommodate any kind of satisfactory economic performance—particularly in an environment in which precautionary inclinations to hold money and near money may be growing because of economic uncertainty and multiplying signs of financial distress.

New flexibility

The Fed seems to have been signaling a growing willingness to be quite flexible in pursuing its monetary targets, and that new flexibility has been well received by financial markets. But the evolution of Fed procedures cannot yet be said to have been thoroughly tested since money growth has been generally within target ranges in the recent past. What happens if money growth significantly breaks the permissible upper boundary? That is something that is not out of the question given the Fed's more generous reserve strategy recently. Presumably, the Fed's new pragmatism will cause it to limit upward interest-rate tendencies, but until that is in fact demonstrated, the potential conflict between money targets and recovery tendencies remains an inevitable constraint on the psychology of the market.

An especially crucial element in the business outlook is how quickly and to what extent the drop in short-term interest rates will extend into longer-term debt. Fortunately, President Reagan's willingness to expend considerable political capital in achieving a tax increase that will narrow the budget deficit in 1983 appears to have been reassuring to many financial market participants, who had grown skeptical about the government's long-term budget strategy.

The key need now is for that change in mood to be strengthened by an early follow-through in slowing the rise in entitlement expenditures. Here, of course, the Social Security program is critical. The ideal scenario would be decisive Congressional action to shore up Social Security finances before 1982 is over. That would entail a special Congressional session immediately after the November 2 election. A successful outcome in such a session (whose duration would be only about a month) would depend critically on whether an action program could be agreed upon by Republican and Democratic leaders. Clearly, that would require extraordinary political skill. But should there be major progress on Social Security, the psychological dividend for financial markets could very well be enormous.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1982				*1983*
	Q1	*Q2*	*Q3*	*Q4*	*Q1*
Real GNP	−5.1	1.3	0.3	2.7	3.0
Real consumer spending	2.4	2.0	1.0	5.4	2.8
Real business-capital outlays	−5.0	−12.4	−14.7	−11.7	−5.5
GNP deflator	4.3	4.9	6.8	5.5	5.4
Consumer prices	3.2	4.6	7.2	2.1	4.5
Real disposable personal income	−1.9	3.6	3.7	0.9	2.6
Saving rate (%)	6.6	6.9	7.6	6.6	6.6
Housing starts (Millions)	0.9	1.0	1.1	1.2	1.3
Auto sales (Millions)	8.0	7.5	7.7	8.4	8.5
Unemployment rate (%)	8.8	9.5	9.8	9.9	10.0

NOTE: 1982 Q1 and Q2 data are actual.

PRODUCTIVITY: SIGNS OF IMPROVEMENT

THE decade-long slump in productivity growth may be coming to an end. This at least, is the possibility that has been raised by some recent encouraging signs in the productivity data. If such a reversal in the productivity trend could be sustained, it would have fundamental implications for inflation, real growth, and corporate profitability in coming years.

During the 1970s, the 2½% annual productivity increases that had been typical during the 1950s and 1960s began to fade. Between 1970 and 1975, productivity growth slipped to 1½% per year, and during the last half of the decade it slipped even further—actually declining, in fact, between 1977 and 1980.

The collapse of productivity growth played a particularly important role in the acceleration of unit labor cost and hence inflation during the last economic cycle. Between the last two peaks in the inflation cycle (1977-1980 compared with 1972-1975) the rate of increase of unit labor cost rose by 2 percentage points. But two thirds of that can be traced to poor productivity growth —which fell by 1.3 percentage points—and less than one third is attributable to a higher rate of wage inflation.

In the past two years, however, underlying productivity trends have had a brighter look. That to be sure, has been hard to discern from raw productivity numbers themselves, which inevitably have looked weak in the context of the over-all economy's very poor performance. However, when statistical techniques are employed to remove short-term cyclical influences, the basic trend in productivity seems to be strengthening. On a cyclically adjusted basis, productivity growth appears to have reached its low in 1979 and to have rebounded in both 1980 and 1981 (accompanying table). Preliminary figures suggest that, although actual productivity was lower in the first half of 1982 than in the first half of 1981, this was entirely the result of the recession. On a cyclically adjusted basis, productivity continued to grow at a rate of about 1½%.

Productivity: Actual and Cyclically Adjusted

(Percent change)

	Actual	*Cyclically adjusted*
1970	0.5	2.2
1971	3.3	2.7
1972	3.6	2.2
1973	2.6	2.1
1974	−2.2	−0.5
1975	1.8	3.4
1976	3.2	1.5
1977	2.2	1.4
1978	0.6	0.3
1979	−1.3	−1.0
1980	−0.9	0.6
1981	1.4	1.5
1982 (1st half vs. 1st half '81)	−0.9	1.5

NOTE: Productivity figures cover the private nonfarm sector of the economy.

The recent improvement in productivity growth certainly does not represent an end to the productivity problem. In particular, the recent growth rate of productivity of 1½% is still well below the performance of the 1950s and 1960s. Caution in interpreting recent data is also suggested by the fact that it is impossible to explain fully either the deterioration of productivity growth in the 1970s or the apparent recent improvement. Despite these qualifications, however, the recent signs of improvement in productivity growth are important. A brighter trend in productivity would have favorable implications for over-all real growth during the remainder of the decade, in particular as a counterweight to the expected slowing in the growth of the labor force. Such a trend could also significantly ease a transition to lower inflation rates in coming years.

Allied Defenses—Sharing the Burden

THE clash between the United States and its European allies over the Soviet pipeline has obscured what may be a more basic disagreement on East-West relations: the conflict over how much Western nations need to commit to defense. This dispute comes after more than a decade of deterioration in the military balance between the Soviet Union and members of the North Atlantic Treaty Organization (NATO) and Japan, this country's key ally in Asia.

The U.S. has given high priority to countering the Soviet buildup with a rapid rise in defense spending, which was begun by President Carter at the end of his term and accelerated by President Reagan. As a result, the Defense Department's budgetary authority, which was \$142.6 billion in fiscal 1980, will rise to \$257.5 billion in fiscal 1983, according to recent Administration estimates. This amounts to an average real increase of almost 12% a year.

Many NATO allies, while professing to share U.S. concern about the Soviet buildup, differ on the needed pace of response or feel immobilized by a lack of public support for enlarged defense spending. They thus have displayed less urgency about stepping up military outlays. Indeed, most have retreated from a 1978 commitment to increase national defense budgets 3% a year over and above inflation. Meanwhile, Japan recently adopted a five-year defense program that has been called a "major disappointment" by Senator Carl M. Levin, a member of the Armed Services Committee and sponsor of a concurrent resolution expressing the view that Japan should make a greater contribution to its own defense.

In a world awash in budgetary deficits, the reluctance of allies to devote greater resources to defense is understandable. Still, this country's relatively greater defense effort is complicating its budgetary problems enormously. Increases in military outlays have required a contraction of resources for social programs and contributed to huge deficits. The resulting battle over fiscal policy has accentuated criticism in Congress and elsewhere that allied nations are not carrying their fair share of the common-defense burden.

Measuring the burden

One frequent complaint is that most allies devote a smaller share of their resources to defense than the U.S. does. Military spending now accounts for about 6% of this country's GNP and is expected to exceed 6½% next year. Under the Reagan program, moreover, that share is headed for 7½% later in the decade—approximately the same proportion as just before the Vietnam buildup and the subsequent deemphasis on military outlays during the 1970s. Even at the lowest level in 1978-79, when military spending represented less than 5% of GNP, the U.S. devoted a larger share of resources to defense than did most of its allies.

While most allies have shown much less volatility in the share of output devoted to defense, only Britain and Greece have allotted as much as 5% of GNP to the military in recent years. France devotes about 4% and Germany less than 3½% (table on page 9). Japan allots less than 1% of GNP to defense—a share that significantly detracts from the total effort because Japan has the second largest economy among allied nations.

As a result of such disparities, the U.S., with 45% of the combined output of NATO nations, accounts for 55% of total defense spending by

Share of GNP Devoted to Defense—NATO Nations and Japan, 1980

(Percentages)

Belgium	3.3	Italy	2.4
Britain	5.1	Luxembourg	1.0
Canada	1.7	Netherlands	3.4
Denmark	2.4	Norway	2.9
France	3.9	Portugal	3.8
Germany	3.2	Turkey	4.2
Greece	5.1	United States	5.5
Japan	0.9		

SOURCE: *The Military Balance 1981-82*, The International Institute for Strategic Studies. Defense spending is based on NATO definition.

those countries. Add in Japan and the gap between U.S. resources and contributions becomes even wider: with 38% of the gross product of NATO nations plus Japan, the U.S. shoulders 53% of the combined defense spending.

Military outlays as a share of a nation's output, of course, are only a proxy of that nation's defense effort. They tell little about what a country contributes in terms of manpower or weapons, the costs of which vary from country to country. Partly because of this, NATO nations have never reached agreement on how to measure relative burdens—though they have agreed on a definition of what can be counted as defense spending.* Even so, the Department of Defense (DOD)—in response to a Congressional requirement that it report on allies' efforts—has developed a number of measures, physical as well as financial, in an effort to relate each country's contribution to its resources.

First, DOD calculated each nation's share of the combined gross domestic product and population of NATO nations and Japan. It also calculated each nation's share of total defense spending, active defense manpower, active and reserve defense manpower, armored divisions, and combat aircraft. DOD then divided each nation's contribution (measured, for example, by its share of defense spending or manpower) by its ability to contribute (measured by its share of GDP or population). In this rating system, a country making a defense contribution proportionate to its resources is considered to be at the norm, with an index number of 1.0.

As can be seen in the table on page 10, the U.S. is clearly carrying a disproportionate share of the NATO-Japan defense burden. The ratio of this country's share of defense spending (53%) to its share of gross product (38%) is 1.39—well above the 1.0 norm. Similarly, the U.S. ratio of military manpower to population is high. Other measures shown in the table match or exceed the norm.

Viewed in this way, this country's NATO allies as a group seem to be making a defense effort roughly equivalent to their resources, while Japan is shown to be making a conspiciously small contribution in comparison with its resources. The defense spending/GDP ratio for non-U.S. NATO nations is a bit below the norm, but other ratios for those nations collectively are above it. Large disparities are evident, however, in efforts of individual countries.

Britain and two poorer NATO allies—Turkey and Greece—stand out as making relatively large contributions. Britain ranks high on both the defense-spending load it shoulders and the

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*The NATO definition of defense spending, broadly speaking, includes outlays by national governments specifically to meet the needs of the armed forces. In the case of the U.S., the definition permits inclusion of, in addition to Defense Department expenditures, outlays for the Coast Guard, for defense-related items in the Energy Department, for the Selective Service System, and for military assistance.

Among items that may not be counted by the U.S. or other countries are veterans' benefits, civil defense, and stockpiling of industrial raw materials.

Defense Contribution Compared with Ability to Contribute, 1980

(Ratios)

	Defense spending share/GDP share	*Active defense manpower share/ population share*	*Active and reserve defense manpower share/ population share*	*Armored division equivalent share/ GDP share*	*Combat aircraft share/GDP share*
Total NATO and Japan	1.00	1.00	1.00	1.00	1.00
United States	1.39	1.26	1.07	1.01	1.17
Japan	0.25	0.21	0.15	0.42	0.38
Non-U.S. NATO	0.92	1.09	1.24	1.17	1.06
Belgium	0.86	1.11	1.41	1.03	1.68
Britain	1.33	0.98	0.78	0.69	1.11
Canada	0.50	0.47	0.33	0.22	0.67
Denmark	0.63	0.80	1.50	2.30	1.36
France	1.05	1.25	1.24	0.50	0.84
Germany	0.84	1.02	1.32	0.89	0.73
Greece	1.45	2.09	3.13	8.55	6.68
Italy	0.63	0.91	0.95	1.11	0.87
Luxembourg	0.29	0.40	0.20	0.04	0.00
Netherlands	0.81	0.90	1.21	1.22	0.98
Norway	0.75	1.15	4.19	2.61	1.45
Portugal	0.92	0.94	0.85	1.36	1.92
Turkey	1.21	1.62	1.90	14.27	4.65

NOTE: Gross domestic product and defense spending converted to U.S. dollars at 1980 exchange rates. Defense spending calculated according to NATO definition. Ground forces armored division equivalent is a relative measure of ground forces' effectiveness based on quantity and quality of major weapons.

SOURCE: *Report on Allied Contributions to The Common Defense,* Department of Defense, March 1982.

number of combat aircraft, and it is in line with the norm for active manpower. Greece and Turkey rank high on all of the indicators, whereas readings for the more affluent northern European nations are mixed. Canada, in contrast, ranks far below the norm on all indicators —suggesting that that country, like Japan, contributes much less than it is capable of doing.

Still, such indexes fail to reflect important variables that this country's allies insist should be considered in burden-sharing assessments. Most European nations, for instance, rely heavily on conscripted forces and thus have lower personnel costs than does the U.S. with its volunteer forces. They argue—and correctly so—that defense-spending comparisons understate their efforts. It is nevertheless clear from the second column in the accompanying table (showing the relationship between active defense manpower and population) that the U.S. makes a relatively greater personnel contribution than does the rest of NATO combined or most European nations individually.

A further consideration is that this country's strategic interests call for projecting American forces far from U.S. shores. This necessarily entails heavy expenses not required of allies that have few far-flung military commitments.

While some charge that Europe and Japan get a free ride on U.S. global responsibilities, European allies point out that they would contribute their airports, highways, and other facilities to the Western defense effort in the event of war with the Soviet Union. They also would provide 75% of the air forces, 80% of the naval forces, and 90% of the ground forces initially committed to the forward defense. Meanwhile, Germany—which has large armed forces of its own and also is host to sizable contingents of U.S. and other foreign forces—contributes real estate for military use that is estimated to be worth $80 billion. That contribution, the Germans maintain, is not recognized by critics in the U.S., where land values are appreciably lower. In Japan, a frequent theme is that the U.S. does not acknowledge that country's contribution in providing forward bases in a nation sometimes called an "unsinkable aircraft carrier." Many Japanese, moreover, feel that the country already is stretching the letter and the spirit of its "Peace Constitution" in making the self-defense effort it plans under the new five-year program.

The 3% test

As such considerations suggest, efforts to devise an acceptable measure of burden-sharing present complex problems. Even so, some U.S. critics of European nations' defense efforts say that land, troop commitments, airports, and the like have little bearing on the widespread failure of this country's allies to meet the goal, adopted in 1978 and reaffirmed several times thereafter, of increasing outlays by 3% a year in real terms.

The 3% commitment was made in conjunction with the adoption in 1978 of NATO's Long-Term Defense Program, an effort to im-

The 3% Record

(Percent change in defense spending from previous year in constant prices)

	1979	*1980*	*1981*
Belgium	2.2	2.0	0.2
Britain	3.0	2.7	2.1
Canada	−0.9	5.1	3.0
Denmark	0.2	0.7	0.1
France	2.5	3.9	3.5
Germany	1.8	1.9	1.9/3.4
Greece	−2.9	−8.8	5.6
Italy	2.6	4.9	−1.2
Luxembourg	3.5	16.3	7.1
Netherlands	3.9	−1.5	2.3/3.4
Norway	1.9	1.8	2.5
Portugal	2.9	10.1	2.8
Turkey	2.6	2.0	3.1
United States	3.4	4.9	5.4
Non-U.S. NATO	2.2	2.6	2.2/2.6
NATO Total	2.9	3.8	4.0/4.1

NOTE: All figures in this table are based on the NATO definition of defense spending. Non-U.S. NATO and NATO totals reflect weighted average growth rates developed using 1980 constant prices and exchange rates. Figures for 1981 are estimates and in some cases indicate a range within which the final figure is expected to fall (for example, the non-U.S. NATO weighted average is estimated to be between 2.2% and 2.6%).

SOURCE: *Report on Allied Contributions to The Common Defense*, Department of Defense, March 1982.

prove NATO's conventional capabilities that was prompted by concern over the Warsaw Pact's conventional-force superiority. At the time, 3%—although not considered enough to right the balance—was viewed as necessary to keep NATO from falling further behind.

While the U.S. has been exceeding the goal, only about half of the other NATO nations have achieved a 3% real increase in any one year (table on page 11). Moreover, for non-U.S. NATO nations combined, the weighted average increase this year is projected to be the lowest since the goal was adopted—between 1.6% and 2.1%. The foot-dragging, according to DOD, will delay the long-term program and result in widespread shortfalls in meeting NATO force goals.

Europeans often defend their failure to meet the 3% goal on the ground that their budgets are caught in a squeeze between adverse economic conditions and domestic pressures that make it difficult to scale back social programs. They also suggest that their record looks better when trends in real military outlays are viewed over the past decade rather than over the past four years. During the 1970s, when the U.S. curtailed defense spending in real terms, the NATO allies kept real outlays rising at roughly the same rate U.S. outlays contracted (about 2% a year). They thus assumed a growing share of NATO nations' total defense expenditures (37% in 1971, rising to 45% in 1979).

The Soviet buildup

The increase in NATO allies' spending, however, did not fully offset the decrease in U.S. spending. As a result, NATO nations' total outlays (measured in constant 1979 dollars) declined about 3% between 1971 and 1979. With Japan also increasing its outlays in real terms, (at an average annual rate of nearly 7%), combined real defense spending during the 1971-79 period edged off about 1½%.

While the West stood still for a decade, the Soviet Union—which accounts for nine tenths of Warsaw Pact outlays—was forging ahead with a rapid expansion of its military forces. Although that country's defense-spending pattern is not known with certainty, a widely accepted estimate is that Soviet outlays continued to rise during the 1970s at a real rate of 4% to 5% a year and consumed 12% to 14% of GNP each year. Recent estimates by the U.S. Defense Intelligence Agency indicate that the share has risen even higher lately—to 14% to 16% of GNP. This single-minded commitment of resources to the military—along with a slowing in the growth of the Soviet economy—has taken a heavy toll on the country's living standards.

Collectively, Warsaw Pact countries have spent less on defense over the past decade than have NATO nations and Japan collectively.* Significantly, however, the Soviet-led group—with lower manpower costs—has outspent this country and its allies on weapons procurement, military construction, and research and development. Currently, according to DOD, such Warsaw Pact programs are 15% to 20% larger than those of NATO nations and Japan.

The upshot, as General David C. Jones, former chairman of the joint chiefs of staff, has put it: "The Soviets have for years continued to out-man, out-gun, out-build, and out-deploy us in most meaningful military categories, all the while shortening our qualitative lead in many important areas." Although General Jones was commenting on the U.S.-Soviet competition, his observation could apply equally to the NATO-Warsaw Pact situation. The imbalance that has built up over the years, many experts agree, will take years to redress and will require sustained efforts by the U.S. and allied nations to enhance the West's combined strength.

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*According to a U.S. Defense Department estimate, cumulative defense outlays by NATO nations for the 1971-80 period amounted to the equivalent of $2,100 billion-$2,500 billion (U.S. dollars, 1980 prices), with the range reflecting uncertainty regarding the calculation of dollar equivalents for non-U.S. NATO outlays. During the same period, the agency estimates, cumulative Warsaw Pact outlays amounted to the equivalent of $1,800 billion-$2,200 billion, with the range reflecting uncertainty about actual spending levels and problems associated with different pricing systems and exchange-rate conversions.

Implications for NATO and Japan

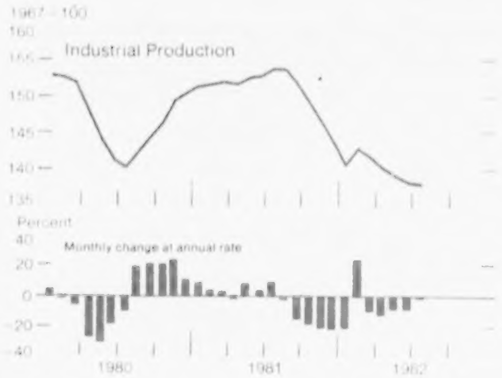
The U.S. has taken a vigorous lead in restoring the military balance. This country is modernizing and expanding a whole range of conventional and nuclear military forces. The effort includes development of intermediate-range nuclear forces–Pershing IIs and ground-launched cruise missiles–which under a 1979 NATO agreement are scheduled for deployment in Europe at the end of next year. The U.S. also is taking on further, very costly, military responsibilities–in particular, the projection of American forces into Southwest Asia to protect the Persian Gulf oil lifeline on which Europe and Japan depend far more than does this country.

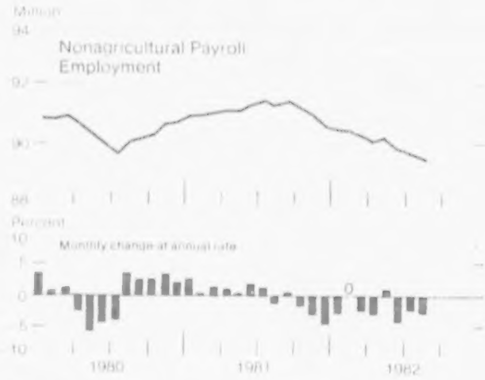
Meanwhile, U.S. officials have been pressing allied nations to play a greater part of their own in restoring the military balance. These efforts have centered on persuading allies of the need to strengthen their own conventional capabilities and gaining greater support for U.S. forces now stationed in Europe or scheduled for reinforcement in a crisis.

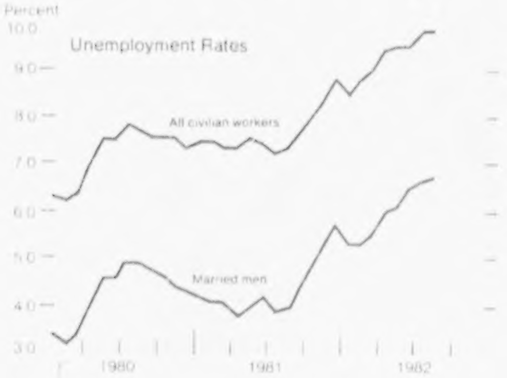
The crux of the matter, according to many analysts, is that the advent of nuclear parity has increased demands on the Western alliance for stronger conventional capabilities. In the past, U.S. nuclear superiority permitted this country and its allies to deploy smaller and less expensive conventional forces than would otherwise have been necessary. This is because NATO traditionally has relied on a threat to use U.S. nuclear weapons if its conventional forces were swamped in an initial confrontation. That threat, many analysts believe, now has less credibility, with the result that the U.S. and allied nations must rely more heavily than before on conventional forces.

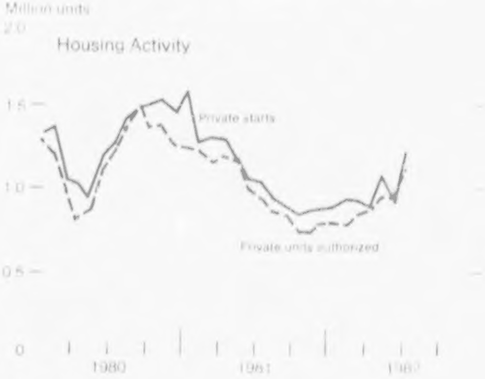
There is no question that NATO nations and Japan–with a combined GNP about three times that of the Soviet bloc–have ample resources to preserve a credible deterrent. Moreover, for all the budgetary difficulties the U.S. and allied nations face in deciding to allocate larger resources to defense, they really have no choice. Whether the Soviets see increased defense spending by NATO nations and Japan as an inducement to negotiate seriously about reduction of nuclear and conventional forces may be open to question. But it is essential that the Soviet Union have no misperception of U.S. and allied nations' resolve.

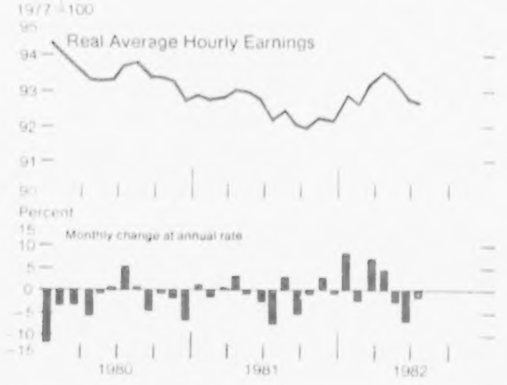
ECONOMIC INDICATORS

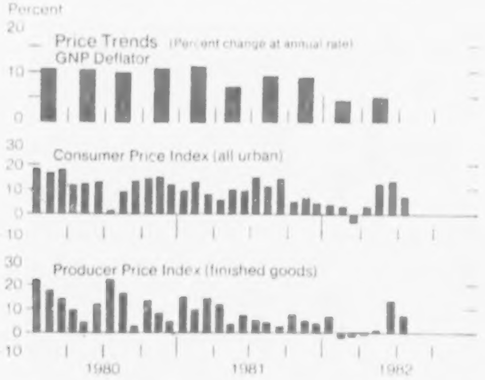






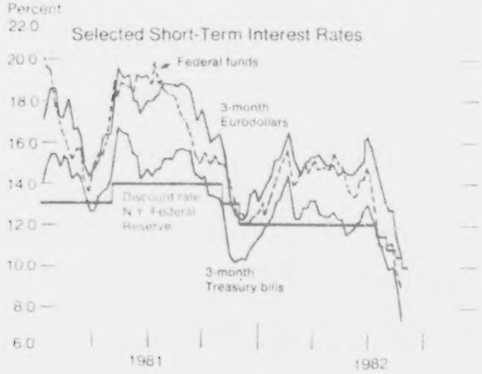


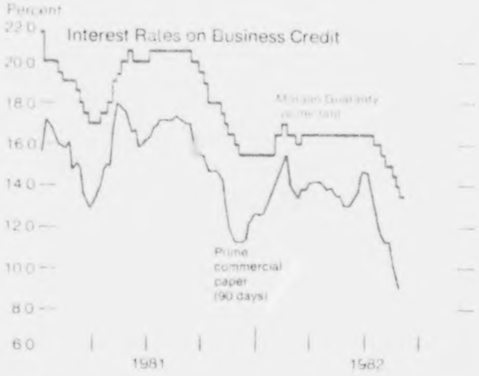


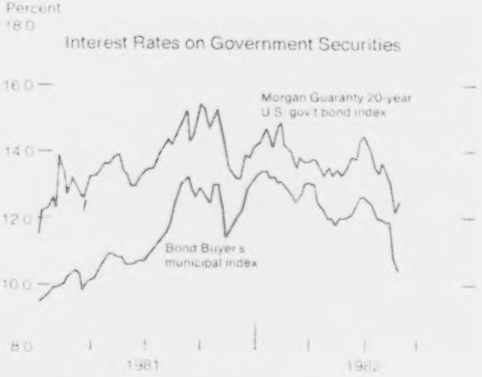


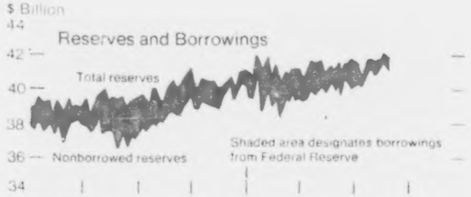
NOTE: All data are seasonally adjusted. Hourly earnings are adjusted for overtime in manufacturing and for interindustry employment shifts.

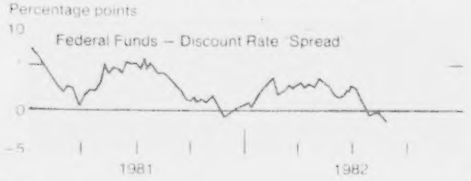
MONETARY INDICATORS

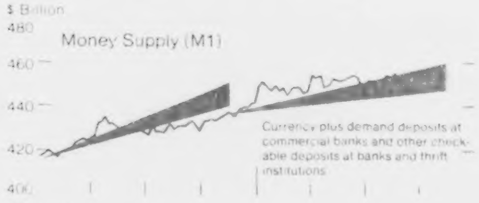

Selected Short-Term Interest Rates

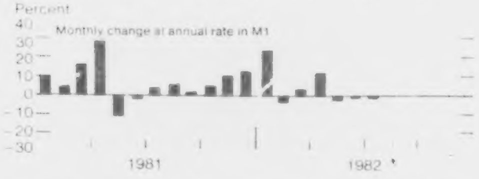

Interest Rates on Business Credit

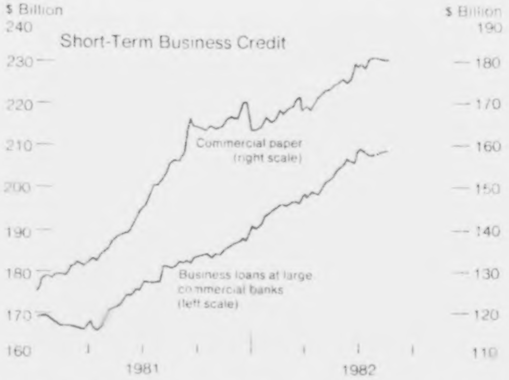

Interest Rates on Government Securities


Reserves and Borrowings


Federal Funds – Discount Rate "Spread"


Money Supply (M1)


Monthly change at annual rate in M1


Short-Term Business Credit

NOTE: Shaded areas on the money supply chart represent the Federal Reserve growth targets for the periods from the fourth quarter 1980 to fourth quarter 1981 and from the fourth quarter 1981 to fourth quarter 1982. Business loans are net of bankers acceptances. All data except interest rates and member bank borrowings are seasonally adjusted.

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Economic Indicators. 15

Balance Sheets and the Consumer-Led Recovery

CONTRARY to expectations of most economic analysts, the consumer has yet to lead the United States economy down the road to recovery. Despite a fairly well maintained stream of income growth—aided importantly by the second installment of last year's multistage tax cut—retail sales were essentially unchanged from the second to the third quarter.

What lies behind this sluggishness in consumer spending? Much of the hesitancy reflects growing economic insecurity—as unemployment, excess capacity, and business failures have reached levels not seen for many years. Less obvious, but also important in assessing prospects for consumer spending, has been a deterioration in household wealth and balance sheet conditions.

Strains are showing up on both sides of the household ledger. The debt burden, relative to wealth, has increased in recent years and liquidity problems are apparent when judged against earlier cash positions. These trends suggest a growing need for households to restore debt and liquidity positions to more tolerable levels. The process of paying down debt and acquiring liquid assets could absorb much of the added income generated by the tax cut. This, in turn, could restrain consumer spending for some time to come.

Significant shifts in the makeup of the household balance sheet have taken place since World War II (table on page 2).* On the as-

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*Balance sheet data are drawn from the Federal Reserve's "Balance Sheets for the U.S. Economy: 1945-81"—a by-product of the flow-of-funds statistics. Household-sector balance sheets reflect a combination of current-market and replacement-cost valuations and also include assets and liabilities of personal trusts and nonprofit institutions.

Changing Composition of the Household Balance Sheet

(Figures in percent based on year-end outstandings)

	1950	*1960*	*1970*	*1980*
Assets	**100.0**	**100.0**	**100.0**	**100.0**
Tangible	28.6	30.5	31.8	36.7
Housing	16.3	18.4	19.0	24.6
Consumer durables	10.2	9.8	10.0	9.6
Other	2.1	2.3	2.8	2.5
Financial	71.4	69.5	68.2	63.3
Bank deposits	12.1	12.1	14.8	16.2
Credit market instruments	10.0	7.7	6.9	6.0
U.S. Governments	6.7	3.8	2.9	2.8
Other	3.3	3.9	4.0	3.2
Equities	40.6	40.0	35.6	30.9
Corporate	13.2	20.2	19.8	12.0
Noncorporate	27.4	19.8	15.8	18.9
Pension and insurance reserves	7.8	9.0	10.1	9.4
Other	0.9	0.7	0.8	0.8
Liabilities	**100.0**	**100.0**	**100.0**	**100.0**
Consumer credit	33.3	28.5	28.5	25.8
Home mortgages	54.5	60.2	57.9	63.0
Other	12.2	11.3	13.6	11.2

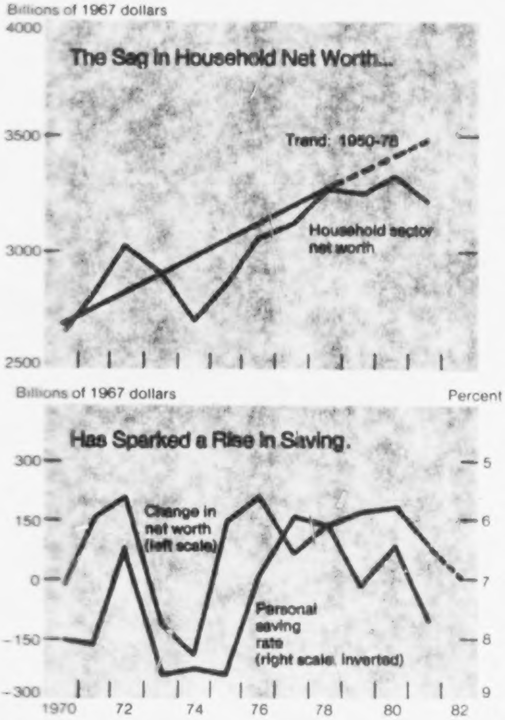
NOTE: Housing includes owner-occupied land and residential structures. Other tangible assets are fixed capital held by nonprofit institutions. Other credit market instruments include mortgages, state and local obligations, corporate and foreign bonds, and open-market paper. Other financial assets include mainly security credit. Other liabilities include miscellaneous loans, mortgages, security and trade credit, and deferred and unpaid life insurance premiums. For 1980, bank deposits include money market mutual funds.

set side, the housing boom of the 1970s led to a sharp runup in the market value of the nation's housing stock. At the same time, a sagging stock market took its toll on consumer holdings of corporate equities. As a result, while housing values and stock portfolios were nearly equal in size during the 1960-70 period, a decade later a considerable gap had been opened—with the housing stock in 1980 about twice the asset value of corporate stocks.

Other changes in the asset mix have been more subtle. Bank deposits have expanded as a share of total household assets, but this rise has been concentrated in interest-bearing instruments—as checkable deposits and currency have dropped steadily as a proportion of total financial assets. Moreover, U.S. government securities have taken on a diminished role in the household portfolio, largely reflecting the relative unattractiveness of yields on U.S. savings bonds. But outside of those areas the asset mix of the household sector has been quite stable. The share of consumer durables has fluctuated within a narrow range, as have holdings of other credit market instruments and reserves of life insurance and pension funds. Even noncorporate equities—that is, the valuation of closely held businesses and partnerships—garnered a fairly steady share of household-sector assets in the 1960s and 1970s.

Growth in liabilities during the 1970s shifted away from consumer installment credit and into mortgage instruments—a natural by-product of of the housing boom. But growth of housing mortgages lagged behind increases in the valuation of residential structures. The result: a boost in the net worth of households during the latter half of the decade that reflected sizable gains in the value of the nation's housing stock.

Even so, consumer success in portfolio management has not been particularly impressive in



NOTE: Household sector net worth deflated by end-of-year Consumer Price Index.

the past two decades. Despite the dramatic move out of the stock market and into housing, the growth of net worth in real terms has slowed steadily. In the 1950s real household wealth grew at roughly a 5% average annual pace. This growth rate slowed to 3½% in the 1960s and by the 1970s had fallen to 2%.

Recent trends are even more discouraging. Household net worth in real terms fell back sharply in 1981—after two years of sluggish growth—to a level well below that of 1978 (accompanying chart). Moreover, this year's drop in net worth could easily match that of last year, making 1979 to 1982 the weakest four-year period of real wealth accumulation since World War II.

The driving force behind the recent slippage in household-sector net worth has been the sharp turnaround in the fortunes of the housing market. House price appreciation slowed dramatically in 1981 after a decade of increases that averaged roughly 10% a year. Declining stock prices also cut into the market value of equity portfolios during 1981 and the first half of this year.* But equity investments have a liquidity dimension that home ownership sometimes lacks, and consumers at least had the option of moving out of the stock market and into higher yielding financial assets such as money market mutual funds. By contrast, due to the recent slump in housing-market activity, consumers found themselves "locked into" housing investments. Forced to hang on to existing assets until market conditions improve, households have had little choice but to absorb much of the recent decline in wealth.

Still, consumers have not been entirely unresponsive to these developments. Since 1979, households have moved aggressively to pay down debt in the face of shrinking asset values. Even so, the debt burden remains worrisome. True, relative to income, repayments of installment credit were lower in early 1982 than they had been in well over a decade (upper panel of chart on page 4). But when measured against net worth, total household-sector liabilities—installment, mortgage, and other consumer credit obligations—were just about as high at the end of last year as they were in late 1974. Thus, while debt service has not been a problem relative to current income flows, liabilities outstanding have risen relative to net worth. This reflects the fact that the paring of debt has

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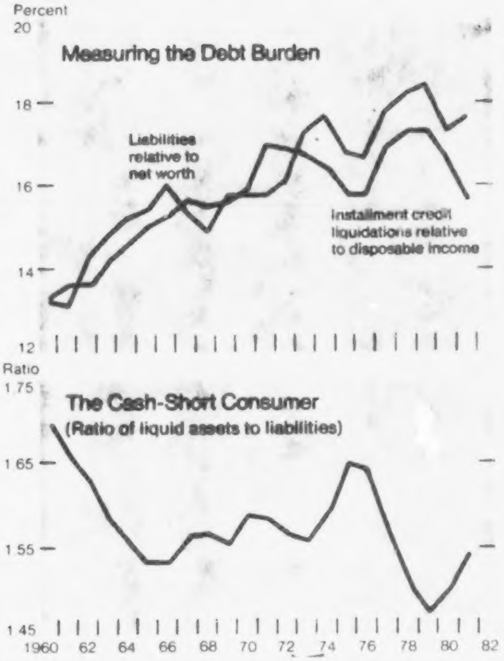
*To be sure, share prices have risen sharply in the past two months. In the first week of October, however, equity prices—as measured by the S&P composite—were only about equal to the average level in 1981.



not proceeded rapidly enough to offset the unexpected shrinkage of asset values. The result has been steadily mounting pressure on household-sector wealth positions.

Moreover, liquidity positions remain out of line relative to recent historical trends. Liquid assets—bank deposits and credit market instruments—moved sharply lower relative to total liabilities during the late 1970s (lower panel of chart on this page). This ratio had fluctuated in a fairly narrow range since the mid-1960s. And, even after improving slightly during the past two years, liquidity strains in the household sector still persist.

Given that household investors seek to prevent significant erosions in wealth positions, the recent squeeze on net worth does not bode well for consumer spending prospects. As the bottom panel of the chart on page 3 illustrates, movements in the personal saving rate—which reflect the allocation of take-home pay between spending and saving—are very much a function of changing wealth positions. When wealth drops, saving tends to increase as households strive to shore up sagging portfolios by the acquisition of higher yielding assets.

Thus, this summer's consumer hesitancy—despite the presumed impetus of the July 1 tax cut—is not that surprising. As long as net worth continues to remain depressed in real terms, the prudent response of the consumer is to maintain a high saving rate and channel incremental income flows into assets with the highest rate of return. In a period when inflation's pace has slowed significantly, that investment strategy obviously favors financial assets over tangible assets. As a result, consumer spending on durables and other discretionary goods should remain low relative to income—keeping the saving rate on the high side.

Additionally, because the psychology of the consumer has been jarred by growing signs of financial distress both at home and abroad, even well maintained income growth may not be sufficient to spark a rebound in consumption. In the final analysis, consumer confidence about prospective economic conditions has a critical influence on the discretionary spending decision. And with balance sheet strains set against the backdrop of an increasingly cautious market psychology, consumer hesitancy could continue for some time to come.

Economy Watch

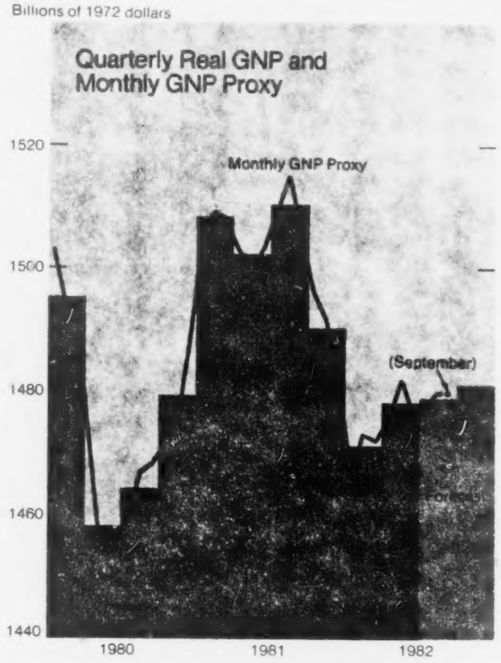
NEITHER detailed statistics on economic activity nor comments of businessmen are very upbeat. Both convey the impression of an economy limping along, with little promise of any near-term buoyancy. Particularly worrisome has been the continuing weakness in job markets—as evidenced by the high level of new claims for unemployment insurance benefits and by a further decline in the number of workers on nonfarm payrolls in September.

Businessmen and economists are well known for being overly pessimistic near cyclical troughs. But while a pleasant surprise this winter is not out of the question, the formal case for anticipating an upturn is not compelling.

Working against a near-term upswing are the continuing high levels of real (inflation-adjusted) interest rates and considerable strain in the financial environment. At the same time, the strength of the dollar is discouraging exports and encouraging substitution of imports for domestically produced goods. Moreover, income erosion from employment losses has effectively negated a considerable part of the mid-year tax cut. The cumulative decline in payroll employment between June and September (amounting to 800,000 jobs) has lowered the annual rate of disposable income by more than $7 billion below what it otherwise would have been.

The failure of the recovery to develop as early as had been expected—and growing uncertainties as to whether money-supply measures are giving off distorted readings—is behind the apparent willingness of the Federal Reserve to tolerate money growth (for both M1 and M2) above targeted ranges. Marketplace belief that the Fed has adopted a more flexible approach to its monetary-targeting procedures ignited a dramatic upsurge in both the stock and bond markets as the first week of October came to a close.

Interest rates have declined substantially since spring—with the Federal funds rate currently some 500 basis points lower than it was in June. Even so, real interest rates remain formidably high, far above their typical readings during a recession. As of the first week of October, real interest rates—as measured by the difference between the Federal funds rate and the basic inflation rate—were between 4% and 5%. In sharp contrast, real rates were negative at the comparable stage of the 1974-75 recession.



NOTE Proxy is derived by interpolation from quarterly GNP (actual and projected) on the basis of available monthly data

Against this background, two key questions arise: Are today's real rates insuperable barriers to meaningful recovery? What can be achieved within the framework of more flexible Federal Reserve targeting in reducing them?

Among private-sector economists, there is a growing conviction that appreciable recovery may not occur without a further substantial decline in interest rates. That judgment is shared by The Morgan Bank's economics staff and reflected in this month's lowered GNP forecast for the near term. Whereas a month ago real GNP was forecast to grow at almost a 3% rate in this year's final quarter, estimated growth is now at only a 0.4% annual rate* (accompanying table).

If growth should in fact remain weak through the winter, it seems highly likely that the Fed will adopt an increasingly supportive posture. What makes it seem likely that the Fed will use its targeting apparatus with continuing flexibility is that significant new distortions will affect money-growth movement this fall and winter. As is widely recognized, there is no way of gauging how maturing All Savers Certificates will affect the aggregates. Moreover, it is not clear how deposit flows will be affected when commercial banks and thrifts have authority, as they shortly will, to offer accounts similar to those of money-market funds. Flexible use by the Fed of its targeting procedures would afford latitude for a significant further decline not just in the Federal funds rate but in the whole array of short-term money rates. Lower short-term rates, in turn, should trigger a continuing reduction in intermediate- and longer-term rates, which are critical to such sectors as homebuilding and business investment. That process of rate reduction should lead eventually to a quickening of the economy's growth pace and lessened financial strain for hard-pressed borrowers. Thus, beyond the months immediately ahead, the outlook is brighter. But precisely when an upturn will get under way—and how strong it will be—is far from certain.

Economic Projections

(Percent change at annual rate from previous quarter, except where noted)

	1982				*1983*
	Q1	*Q2*	*Q3*	*Q4*	*Q1*
Real GNP	−5.1	2.1	0.3	0.4	2.6
Real consumer spending	2.4	2.5	1.0	3.9	3.5
Real business-capital outlays	−5.0	−11.8	−14.6	−12.7	−5.9
GNP deflator	4.3	4.6	6.9	5.6	5.2
Consumer prices	3.2	4.6	7.5	2.3	4.8
Real disposable personal income	−1.9	3.1	2.7	0.7	2.2
Saving rate (%)	6.6	6.7	7.1	6.4	6.1
Housing starts (Millions)	0.9	1.0	1.1	1.1	1.3
Auto sales (Millions)	8.0	7.5	7.6	8.2	8.6
Unemployment rate (%)	8.8	9.5	9.9	10.1	10.3

NOTE: 1982 Q1 and Q2 data are actual.

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*Unusually heavy processing of foreign trade documents by the Commerce Department had the effect of raising August imports. If that "bunching up" is not reversed in September, the effects could carry into October—artificially boosting the increase of fourth-quarter GNP. The Morgan Bank's economic projections assume that such a distortion will not occur.

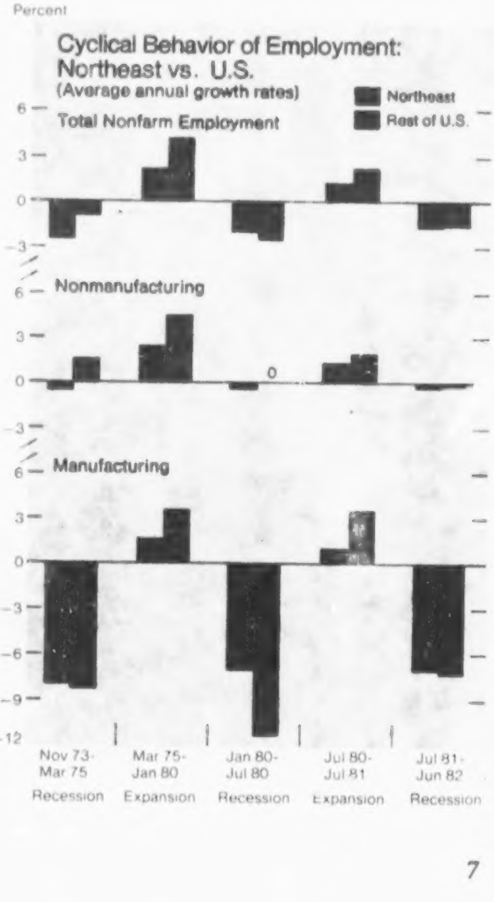
The Northeast: It's Coping Better

THE economy of the Northeast*—like that of the rest of the country—has been buffeted by the recession. But the region is weathering the downturn better than the rest of the United States. For example, the unemployment rate for the Mid-Atlantic and New England states in the March-to-August period averaged under 9%, almost a full percentage point below the U.S. rate. Moreover, growth of personal income in the region has held above the average U.S. gain for most of this year.

Recent trends in the Northeast reveal a significant change compared with the pattern of the 1970s. Employment in the region during the recessions of that period fell more sharply than in the rest of the nation and remained well below the national average long after recovery began elsewhere. During the 1974-75 downturn, for example, private employment in the region fell by 2.5%, as compared with a drop of 1% in the rest of the U.S. (chart on this page). While the drop in employment was widespread, most of the decline was concentrated in the cyclically sensitive manufacturing sector. Large employment losses were especially noticeable in the older textile and leather-goods industries.

Post-Vietnam war cutbacks in defense spending added to the region's economic troubles. Between fiscal years 1969 and 1975, U.S. defense spending (in constant 1972 dollars) fell by 30%. The New England and Mid-Atlantic states—which typically received between 25% and 30% of the nation's defense contracts—were particularly hard hit. Moreover, the federal government closed numerous air bases and port facilities in the region—the most notable being Rhode Island's Quonset Point Naval Air Station and the South Boston Naval Annex.

An added depressant for the region in the 1970s: the two OPEC oil "shocks" (1974 and 1979), which battered the oil-short Northeast. Increased energy prices and higher wage levels than those prevailing in other parts of the nation worsened the relative cost competitiveness of the Northeast, causing many firms to leave. That exodus not only reduced employment but also retarded the subsequent recovery. Nonfarm employment in the region, for



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*Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania.

A Shift in the Northeast's Industrial Mix

(Measured by wage and salary disbursements as percent of regional total)

	Shrinking Share						*Expanding Share*					
	Construction	*Primary metals*	*Electrical equipment*	*Non durable**	*Trade*	*Government*	*Mining*	*Fabricated metals and machinery*	*Other durables***	*Transportation*	*Finance, insurance, real estate*	*Services*
Northeast												
1979-80	4.1	2.2	3.4	10.7	16.0	16.4	0.5	6.1	10.1	7.7	7.3	18.1
1970	5.7	2.6	3.7	12.8	16.2	16.6	0.4	5.8	9.9	7.6	6.5	14.9
Difference	−1.6	−0.4	−0.3	−2.1	−0.2	−0.2	0.1	0.3	0.2	0.1	0.8	5.2

*Textiles, apparel, leather products, chemicals.

**Ordnance, instruments, and transportation equipment excluding motor vehicles.

example, grew at a rate 2 percentage points below that in the rest of the U.S. over the period from March 1975 to January 1980.

Turnaround time

The troubled times of the past decade have now taken a turn for the better—despite an inauspicious beginning for the U.S. economy in the 1980s. As shown in the chart on page 7, the Northeast has weathered the past two recessions better than it did the downturn of the mid-1970s. During the 1980 recession, for example, manufacturing employment fell by 7% in the Northeast versus 11.2% in the rest of the U.S. In contrast, declines in manufacturing employment were about equal in the 1974-75 recession.

What's behind the improvement? Changes in the region's industrial base are a major contributing factor. The Northeast has become less dependent on those industries that have been bearing the brunt of the federal government's anti-inflation policies: autos, housing, and steel. Instead, the region has become more reliant on defense, high-technology, and service-oriented firms—all of which are less affected by cyclical swings in the economy. Between 1970 and 1980, for example, the region moved away from the production of nondurable goods (textiles, apparel, etc.), primary metals, construction, and electrical equipment—the so-called cyclical industries—and toward the production of nonelectrical machinery (especially computers), nonauto transportation equipment, finance, and services (table on this page). New England, in particular, increased its concentration of "other durables," which include high-technology instruments and defense-oriented aerospace and ship-building industries. The Mid-Atlantic states, especially New York and New Jersey, have benefited from the growth of banking, insurance, and related financial-service industries in recent years.

Additionally, the restructuring of the Northeast's economic base also may have been enhanced by a trend toward lower tax burdens. New York, for example, reduced taxes as a percent of personal income from 15.9% to 14.5% between 1973 and 1980. Connecticut's reduction was even larger–from 12.2% to 9.1% of personal income.

The year ahead

Though the recovery in 1983 is expected to be well below the pace of other postwar recoveries (Economy Watch, page 5), a modest rise in consumer spending should give some lift to the Northeast's service industries, and any increase in saving should benefit the financial industry. Because the Northeast is second only to the Far West in defense contracts, the whopping 23% runup in unfilled defense orders that has occurred over the past year also should help offset any drag on employment growth caused by sluggish spending for heavy industrial capital goods and for construction. All in all, the recovery in 1983 should boost payroll employment in the Northeast by 1.1%. While this growth would be 0.7 percentage points below the growth expected for the rest of the U.S. in 1983, this difference would be an improvement over the 1-to-2 percentage point differential that existed in the last two recoveries.

Despite this expected improvement, barriers to growth continue to exist in the New England and Mid-Atlantic states. Much of the Northeast's infrastructure (roads, bridges, and tunnels) is approaching the end of its useful life. Service disruptions and increased congestion may act as a barrier to future growth.* Cutbacks in federal spending on health and education also could adversely affect the region's growth because of its large service-oriented education sector. In addition, a sluggish recovery in the auto industry could act to hold down growth in the region, especially in the steel and auto centers of Western Pennsylvania and New York. Despite such problems, however, the region has made a significant structural adjustment. Sustained although moderate growth now appears likely in the years ahead.

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*This problem is national in scope. An analysis is contained in "Rebuilding America's Infrastructure," *The Morgan Guaranty Survey*, July 1982.

Housing the Poor: A Better Way

SUBSIDIZED housing in the U.S. traditionally has been construction oriented. This is true of the public-housing program that dates back to the late 1930s—a program whereby Washington pays the debt-service costs of local public-housing authorities and some of their operating costs. And it is generally true of the programs dating from the 1960s and 1970s, which provide aid to low-income tenants (and in some cases home owners) living in privately owned housing.*

Now, however, that approach is being challenged as never before. The Reagan Administration is asking Congress to end funding for construction of public housing and of virtually all other subsidized units. Instead, the Administration wants to put sole reliance on a program of direct aid to low-income families in the form of housing allowances (box on page 13).

The nature of the housing problems of the poor, it is claimed, has changed radically in the four decades since construction-oriented policies were first developed. More important, recognition is growing that such subsidies are extraordinarily costly. They are, moreover, increasingly seen as inequitable—unable to reach more than a small fraction of the eligible low-income population because of their high per-unit cost.

Construction-linked housing subsidies have been vulnerable on these grounds for a long time. Of late, they have become especially so as the nation has searched for ways to trim the federal budget. Because of their rapid growth in the past decade, housing subsidies have become a significant share of "discretionary" expenditures—i.e., those remaining after commitments are met for defense, interest payments, and social insurance. From less than $1 billion in the early 1970s, assistance provided by the Department of Housing and Urban Development rose to over $8 billion in the fiscal year ended September 30. If the rural housing programs of the Farmers Home Administration were factored in, total spending would be in excess of $10 billion.

Per unit, the cost of the present approach to housing subsidies is strikingly high. Servicing the debt of a public-housing unit built this past year is estimated to average $6,000 annually. Subsidies provided to low-income tenants in privately owned, newly built housing are similarly costly—an estimated $5,100 per unit this past year under Section 8 of the Housing and Community Development Act of 1974, the main vehicle for subsidizing tenants in privately owned housing.

Such costs, moreover, will continue to run high, reflecting the long-term nature of housing subsidies. To date, the federal government has incurred an obligation in the vicinity of $250 billion—up from $60 billion as recently as 1975. Most of those funds are committed under construction-linked aid programs.

As detailed in the box on page 13, subsidizing tenants in new housing is extraordinarily expensive in comparison with the alternative approach of subsidizing them in existing housing. The Section-8 program does both—and its budget indicates that the latter approach, whereby subsidies can be used in any moderately priced housing that meets the program's standards, is only about half as costly per unit. The reason: increases in rents since the late 1960s have been moderate in comparison with the rise in the cost of servicing the debt of a new unit. Outstanding obligations, moreover, are only about one fourth as large–reflecting not only the lower per-unit subsidies of the existing-housing program but also the fact that such subsidies are budgeted for fifteen years, half the average life of Section-8 commitments to new buildings.

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*Under such programs, the federal government typically enters into a long-term agreement with property owners to subsidize the rents of low-income tenants—and that is done usually at least several months before construction is begun. As a rule, the subsidy is equal to the difference between a given unit's market rent and 25% of tenant income, the same percentage that applies in public housing. An additional layer of subsidy is provided in the form of a below-market-interest-rate mortgage.

A similar finding came out of the experimental housing-allowance program conducted in twelve locations across the country during the 1970s. Some 30,000 low-income families were given assistance to make up the difference between a set percentage of income–usually 25%–and the cost of renting moderately priced housing meeting certain standards. Detailed data measuring comparative costs at two of the locations–Pittsburgh and Phoenix–indicated that the allowance approach was only a little more than half as costly as public housing or units built under the now defunct Section-236 program of the early 1970s. Official reports concede that allowances did not provide as high a quality of housing. But the finding was that differences in direct benefits to tenants living in public housing or Section-236 projects were nowhere near large enough to justify their higher costs.

Benefiting only a few

Despite the growing budgetary cost of housing subsidies, they continue to serve only a small fraction of low-income families. Of those that have traditionally been targeted for assistance–families that rent and that have incomes below 50% of the median income in their local areas–only about one in four is subsidized.* The system, in effect, provides a large benefit to the small number of households that participate–but nothing to the many more that are needy.

The inequity cuts across income lines as well. Income-eligibility limits under most programs have ranged as high as 80% of the local median –a questionable practice given the incapacity of the programs to provide broad coverage for those in greatest need. Those lucky enough to participate, moreover, typically have better housing than what moderate-income families can afford. A government-sponsored study concluded that the value of housing services provided by units built under Section 8 was about 45% higher than that normally obtained by unsubsidized households with incomes just at the 80% eligibility limit.†

In the past, subsidizing construction made sense because substandard housing was the main concern. That rationale, however, is much weaker than it once was. Measures of the quality of the nation's housing stock over the years reflect a remarkable improvement. For example, complete plumbing facilities exist in 97% of U.S. homes as compared with only 55% in 1940. The proportion of housing units considered overcrowded–20% in 1940–has fallen to 4%. Some Americans, it is true, live in dilapidated quarters and sleep four and five to a room. But surveys of housing quality make clear that these are now rare cases—too rare to be addressed by a program broadly targeted at housing improvement. Their needs might better be served, as the President's Commission on Housing advocated in its April report, by authorizing states and localities to use community development block grants for construction purposes in areas where severe shortages of adequate housing exist.

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*Roughly 3.5 million families–some 80% of them with incomes below 50% of the local median–now receive subsidies under one or more programs administered by the Department of Housing and Urban Development. Traditional public housing accounts for 1.2 million units; Section 8, 1.3 million; the now defunct Housing Act of 1968, most of the remainder. In addition, some 1.4 million families, most of them home owners, benefit from below-market-rate loans extended by the Farmers Home Administration.

†Strikingly, rents in new housing built under Section 8 have climbed to the high end of rents charged for units in the housing stock. Nationwide, only 4% of efficiency and one-bedroom apartments (which predominate in the program) had higher rents, according to a finding of the President's Commission on Housing.

A far more common problem for the poor is an inordinately high housing-cost burden. Almost two thirds of those with incomes below 50% of median income, for example, devote more than 30% of their incomes to rent. About one in four has a rent burden in excess of 50%. High rent burdens for low-income families, of course, have always been the case. It is understandable in view of the run-down state of the U.S. housing stock in the 1940s that the policy course set at that time was to spur production rather than to assist low-income families directly by lightening their rent burdens. Today, however, that long-standing policy appears to be a solution to the wrong problem—even apart from consideration of its budgetary effect and fairness.

Savings—but not right away

That judgment lies behind the Administration's recommendation that no new funding be provided for traditional public housing or for new construction under Section 8 beginning in fiscal year 1983. In addition, the budget calls for canceling many of the commitments made in past years to subsidize several hundred thousand units that had not reached the construction stage as of early this year. The idea is to use the funds, instead, for housing allowances (or "certificates," as the Administration has labeled them) that would be structured along the lines of the Section-8 leased-housing program.

The new approach, even with per-unit costs that are less than half those of present construction-linked programs, would take years to produce any marked slowing in the growth of housing subsidies. The pattern in the near term will be shaped largely by payments made under existing agreements, as well as by completion of the housing units presently under construction. Eventually, substantial saving would be forthcoming—reflecting the dramatic cut in budgetary authority the Administration has proposed. Such spending authorization would fall from $26 billion in fiscal year 1981 to near zero for the next few years, as cancellations of existing authority would just about offset the funds needed to launch the certificates program.

While similar in concept to Section 8 leased housing, the new program would differ in several respects. One significant change would be the elimination of ceilings governing rents charged in subsidized units. This feature, adopted from the twelve-city housing-allowance experiment cited earlier, is expected to give participating families greater freedom of choice—plus a strong incentive not to pay more for a unit than its market value.

The incentive will exist because families will be able to keep any savings that result from renting units for less than the estimated cost of moderately priced housing that meets the program's standards. Greater freedom of choice will come from the option to rent an apartment costing more than the norm.

With tenants paying the marginal rent dollar, allowances are unlikely to put upward pressure on rents—as was demonstrated in the housing-allowance experiment. In the cities tested, rents tended to increase, but not significantly faster than national averages. And this was the

HOUSING ALLOWANCES: A NEW EMPHASIS

THE idea of federal housing allowances for the poor in existing structures—rather than subsidies for newly built housing—is not new. The present Section-8 program, for example, in addition to providing construction-linked subsidies, supports tenants in existing housing. What is new is the idea that existing-housing subsidies would become the only form of federal housing assistance for the poor.

The cost of the program the Administration has proposed would be in the neighborhood of $2,000 per year per assisted family—an amount that would cover roughly 75% of its rental expense. This amount is less than half the cost of present construction-linked subsidy programs. And it is also less than the average provided under the Section-8 existing-housing program—largely because food stamps would be included in the definition of tenant income and because the permissible rent levels on which the subsidies would be based would be appreciably lower.

A new emphasis on allowances would mean that a given level of resources could be used to provide assistance to many more low-income families. Alternatively, the lower per-unit cost could be translated into substantial budgetary saving, the goal of the Administration's program. Either way, the nation would benefit because, dollar for dollar, allowances are a far more efficient means of helping the poor secure decent housing.

case in markets that had low as well as high vacancy rates.*

The favorable experience with rent increases in the experimental program was due in part to the fact that only a relatively small increase in the demand for rental housing came about as a result of the assistance payments. Demand increased only 5%, even in the two cities where the program was open to all income-eligible families. Many did not enroll; others—those in already adequate housing—chose to use the subsidies to lessen their rent burdens rather than upgrade their housing; still others were reluctant to move from substandard housing that could come up to the standards only at greatly increased cost. Still, the experiment demonstrated that incentives to negotiate, along with the competitiveness that characterizes housing markets, will be effective in restraining rents. That is especially significant because concern over rent increases—in addition to concern over substandard housing—has always been a key justification for the new-construction approach to housing subsidies.

Legislative outlook

Chances that the Administration's plan will be approved by Congress are not especially bright. Legislation incorporating its main features was approved by the Senate Committee on Banking, Housing, and Urban Affairs. But the corresponding House committee rejected it, reporting out a bill authorizing the continuation of present programs.

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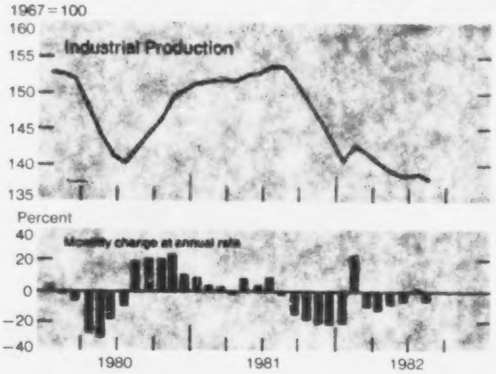
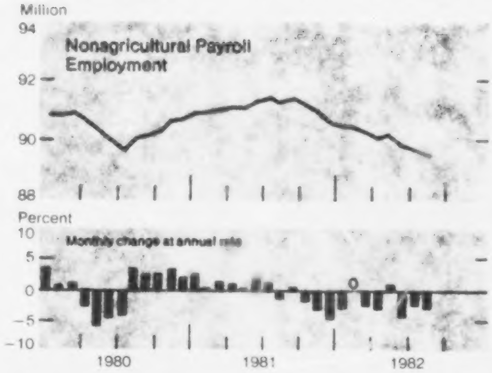
*Experience under the Section-8 leased-housing program has not been so favorable. It provides every incentive to landlords to raise rents to the ceilings—but no incentive to a tenant to negotiate a market price. No matter what the rent, the tenant's contribution to it (25% of income) doesn't vary. An additional criticism of the Section-8 rent ceilings is that they are based on a relatively few characteristics of a housing unit, such as the number of bedrooms. The quality of maintenance is not explicitly taken into account—an inducement to landlords with poorly maintained buildings to participate in the program.

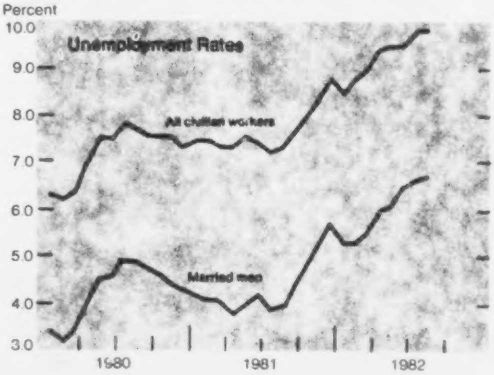
The decision of the House panel, however, was not based entirely on a judgment about the relative merits of allowances and construction-linked subsidies. In large part, it came about because the Administration's plan was viewed as a major retrenchment in housing aid of any kind. Under the plan, canceling prior commitments and simply putting some already-subsidized families into the new program would more than exhaust the roughly 110,000 certificates the Administration has proposed to fund for the coming fiscal year. That would mean no increase in the number of assisted families—as compared with increases of about 200,000 per year in the two preceding fiscal years.

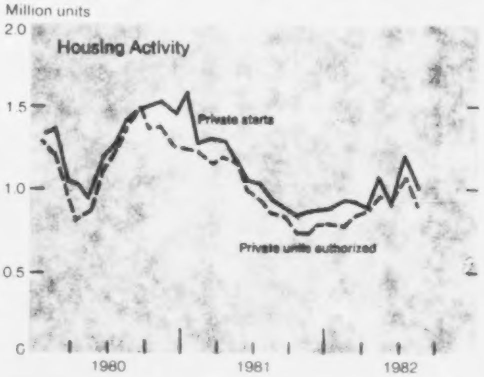
It would be unfortunate if Congress were to reject the Administration's plan on those grounds. Even within a framework of budgetary restraint, there obviously is room for compromise on the number to be assisted under the proposed program. What should not be compromised is the principle that the resources available to subsidize the housing of low-income families be used as efficiently as possible.

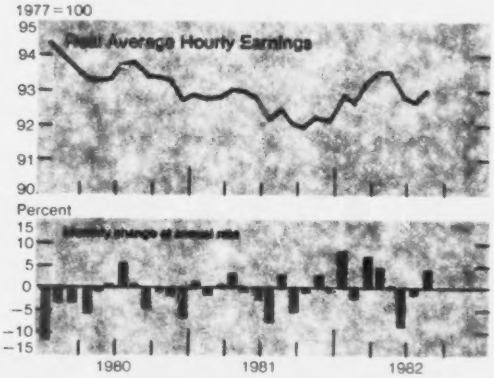
ECONOMIC INDICATORS

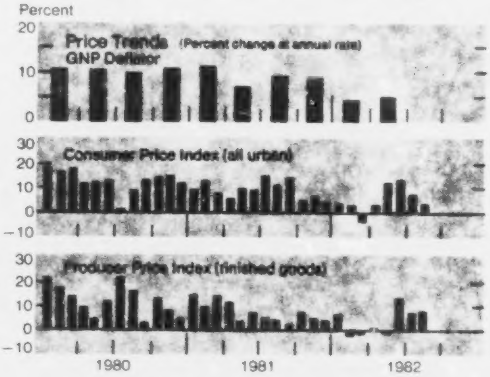












NOTE All data are seasonally adjusted Hourly earnings are adjusted for overtime in manufacturing and for interindustry employment shifts